



East West University

Faculty of

Electronics and Communication Engineering

Diabetics Guide- An Android Application

B.Sc Project on Electronics & Telecommunication Engineering

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ANDROID



Supervisor's Statement

Hereby I confirm that the present project was prepared under my supervision and that is fulfill all the requirements for the Bachelor degree of Electronics & Telecommunication Engineering.

.....

Date

.....

Supervisor's Signature



Author's Statement

Hereby I Declare that the present project was prepared by me and non of its contents was obtained by means that are against the law.

The project has never before been a subject of any procedure of obtaining an academic degree.

Moreover, I declared that the present version of the project is identical.

.....

Nahida Islam Nupur



Acknowledgement

First I would like to express my sincere gratitude to God that I could complete my project. Then I am externally grateful to parents for their constant support through put my academic work.

I am extremely fortunate towards my supervisor Mustafa Mahmud Hussain for helping me throughout the project. He helped me in every possible way for completing my project.

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Abstract

My task was to design and implement an android application that would enable users to interact as a guide. The dedicated application supports OS version from Ice-cream sandwich 4.0 onwards. The significant part was dedicated for designing and implementing a restful API which constitutes communication protocol between client application and the web service. Diabetics Guide application take advantage of many solutions and techniques for the android platform. It has been optimized according to the practices recommended by Google in order to increase user experience and reduce power consumption. The application is design in such a way that provides mass people awareness of their health.



Table of Contents

Chapter 1

Introduction	9
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Chapter 2

2.1 History	11
2.2 Interface	12
2.3 Application	13

Chapter 3

3.1 Revolution in Mobile Experience	15
3.2 Platform usage	17

Chapter 4

Android Architecture	19
----------------------	----

Chapter 5

5.1 Application frame work- fundamentals	21
5.2 Main Application Components	21
5.2.1 Main Activity	21
5.2.2 View	21
5.2.3 XML	22
5.2.4 Intent	22
5.3 Android Manifest	22

Chapter 6 Snapshot and overview of

Diabetics Guide	24
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Chapter 7

7.1	HTML code for Welcome Page	59
7.2	HTML code for MENU Page	61
7.3	Main activity.java	63
7.4	Android manifest Editor	64
Bibliography		66



Chapter 1

Introduction

Android is an operating system based on the Linux kernel, and designed primarily for touch screen mobile devices such as smart phones and tablet computers. Initially developed by Android, Inc., which Google backed financially and later bought in 2005, Android was unveiled in 2007 along with the founding of the Open Handset Alliance—a consortium of hardware, software, and telecommunication companies devoted to advancing open standards for mobile devices. The first publicly available smart phone running Android, the HTC Dream, was released on October 22, 2008.

The user interface of Android is based on direct manipulation, using touch inputs that loosely correspond to real-world actions, like swiping, tapping, pinching, and reverse pinching to manipulate on-screen objects. Internal hardware—such as accelerometers, gyroscopes, and proximity sensors—is used by some applications to respond to additional user actions, for example adjusting the screen from portrait to landscape depending on how the device is oriented. Android allows users to customize their home screens with shortcuts to applications and widgets, which allow users to display live content, such as emails and weather information, directly on the home screen. Applications can further send notifications to the user to inform them of relevant information, such as new emails and text messages.

Android's source code is released by Google under the Apache License; this permissive licensing allows the software to be freely modified and distributed by device manufacturers, wireless carriers and enthusiast developers. Most Android devices ship with a combination of open source and proprietary software. As of July 2013, Android has the largest number of applications ("apps"), available for download in Google Play store which has had over 1 million apps published, and over 50 billion downloads. A developer survey conducted in April–May 2013 found that Android is the most used platform among developers: it is used by 71% of the mobile developer's population.

Android is popular with technology companies which require a ready-made, low-cost and customizable operating system for high-tech devices. Despite being primarily designed for phones and tablets, it also has been used in televisions, games consoles, digital cameras, and other electronics. Android's open nature has encouraged a large community of developers and enthusiasts to use the open-source code as a foundation for community-driven projects, which add new features for advanced users or bring Android to devices which were officially, released running other operating systems.



As of May 2012, Android became the most popular mobile OS, having the largest installed base, and is a market leader in most countries including the United States; there it has had the highest installed base of mobile phones for years. In the third quarter of 2013, Android's share of the global smart phone shipment market—led by Samsung products—was 81.3%, the highest ever. In most markets Android-powered phones is the most popular comprising more than half of the overall smart phone sales, including the United States market starting with the September–November 2013 period. The operating system's success has made it a target for patent litigation as part of the so-called "Smartphone" between technology companies. As of September 2013, one billion Android devices have been activated.



Chapter 2

2.1 History

Android, Inc. was founded in Palo Alto, California in October 2003 by Andy Rubin (co-founder of Danger), Rich Miner (co-founder of Wildfire Communications, Inc.), Nick Sears (once VP at T-Mobile), and Chris White (headed design and interface development at WebTV) to develop, in Rubin's words "smarter mobile devices that are more aware of its owner's location and preferences". The early intentions of the company were to develop an advanced operating system for digital cameras, when it was realized that the market for the devices was not large enough, and diverted their efforts to producing a smart phone operating system to rival those of Symbian and Windows Mobile. Despite the past accomplishments of the founders and early employees, Android Inc. operated secretly, revealing only that it was working on software for mobile phones. That same year, Rubin ran out of money. Steve Perlman, a close friend of Rubin, brought him \$10,000 in cash in an envelope and refused a stake in the company.

Google acquired Android Inc. on August 17, 2005; key employees of Android Inc., including Rubin, Miner, and White, stayed at the company after the acquisition. Not much was known about Android Inc. at the time, but many assumed that Google was planning to enter the mobile phone market with this move. At Google, the team led by Rubin developed a mobile device platform powered by the Linux kernel. Google marketed the platform to handset makers and carriers on the promise of providing a flexible, upgradable system. Google had lined up a series of hardware component and software partners and signaled to carriers that it was open to various degrees of cooperation on their part.

Speculation about Google's intention to enter the mobile communications market continued to build through December 2006. The unveiling of the iPhone, a touch screen-based phone by Apple, on January 9, 2007 had a disruptive effect on the development of Android. At the time, a prototype device codenamed "Sooner" had a closer resemblance to a BlackBerry phone, with no touchscreen, and a physical, QWERTY keyboard. Work immediately began on re-engineering the OS and its prototypes to combine traits of their own designs with an overall experience designed to compete with the iPhone. In September 2007, *InformationWeek* covered an Evalueserve study reporting that Google had filed several patent applications in the area of mobile telephony.

On November 5, 2007, the Open Handset Alliance, a consortium of technology companies including Google, device manufacturers such as HTC, Sony and Samsung, wireless carriers such as Sprint Nextel and T-Mobile, and chipset makers such as Qualcomm and Texas Instruments, unveiled itself, with a goal to develop open



standards for mobile devices. That day, Android was unveiled as its first product, a mobile device platform built on the Linux kernel version 2.6. The first commercially available smart phone running Android was the HTC Dream, released on October 22, 2008.

In 2010, Google launched its Nexus series of devices – a line of Smartphone's and tablets running Android operating system, and built by a manufacturing partner. HTC collaborated with Google to release the first Nexus Smartphone, the Nexus One. The series has since been updated with newer devices, such as the Nexus 5 phone and Nexus 7 tablet, made by LG and Asus respectively. Google releases the Nexus phones and tablets to act as their flagship Android devices, demonstrating Android's latest software and hardware features. On March 13, 2013, it was announced by Larry Page in a blog post that Andy Rubin had moved from the Android division to take on new projects at Google. He was replaced by Sundar Pichai, who also continues his role as the head of Google's Chrome division, which develops Chrome OS.

Since 2008, Android has seen numerous updates which have incrementally improved the operating system, adding new features and fixing bugs in previous releases. Each major release is named in alphabetical order after a dessert or sugary treat; for example, version 1.5 *Cupcake* was followed by 1.6 *Donut*. The latest released version is 4.4.2 *KitKat*, which was released on December 9, 2013.

2.2 Interface

Android's user interface is based on direct manipulation, using touch inputs that loosely correspond to real-world actions, like swiping, tapping, pinching, and reverse pinching to manipulate on-screen objects. The response to user input is designed to be immediate and provides a fluid touch interface, often using the vibration capabilities of the device to provide haptic feedback to the user. Internal hardware such as accelerometers, gyroscopes and proximity sensors are used by some applications to respond to additional user actions, for example adjusting the screen from portrait to landscape depending on how the device is oriented, or allowing the user to steer a vehicle in a racing game by rotating the device, simulating control of a steering wheel.

Android devices boot to the home screen, the primary navigation and information point on the device, which is similar to the desktop found on PCs. Android homescreens are typically made up of app icons and widgets; app icons launch the associated app, whereas widgets display live, auto-updating content such as the weather forecast, the user's email inbox, or a news ticker directly on the homescreen. A homescreen may be made up of several pages that the user can



swipe back and forth between, though Android's homescreen interface is heavily customisable, allowing the user to adjust the look and feel of the device to their tastes. Third-party apps available on Google Play and other app stores can extensively re-theme the homescreen, and even mimic the look of other operating systems, such as Windows Phone. Most manufacturers, and some wireless carriers, customise the look and feel of their Android devices to differentiate themselves from their competitors.

Present along the top of the screen is a status bar, showing information about the device and its connectivity. This status bar can be "pulled" down to reveal a notification screen where apps display important information or updates, such as a newly received email or SMS text, in a way that does not immediately interrupt or inconvenience the user. Notifications are persistent until read (by tapping, which opens the relevant app) or dismissed by sliding it off the screen. Beginning on Android 4.1, "expanded notifications" can display expanded details or additional functionality; for instance, a music player can display playback controls, and a "missed call" notification provides buttons for calling back or sending the caller an SMS message.

Android provides the ability to run applications which change the default launcher and hence the appearance and externally visible behavior of Android. These appearance changes include a multi-page dock or no dock, and many more changes to fundamental features of the user interface.

2.3 Applications

Android has a growing selection of third party applications, which can be acquired by users either through an app store such as Google Play or the Amazon Appstore, or by downloading and installing the application's APK file from a third-party site. Google Play Store allows users to browse, download and update applications published by Google and third-party developers, and the Play Store client application is pre-installed on devices that comply with Google's compatibility requirements and license the Google Mobile Services software. The client application filters the list of available applications down to those compatible with the user's device, and developers may restrict their applications to particular carriers or countries for business reasons. Purchases of unwanted applications can be refunded within 15 minutes of the time of download, and some carriers offer direct carrier billing for Google Play application purchases, where the cost of the application is added to the user's monthly bill.

As of July 2014, there are more than one million applications available for Android in Play Store. As of 2014, 48 billion apps have been installed from Google Play store.



Applications ("apps"), that extend the functionality of devices, are developed primarily in the Java programming language using the Android software development kit (SDK). The SDK includes a comprehensive set of development tools, including a debugger, software libraries, a handset emulator based on QEMU, documentation, sample code, and tutorials. The officially supported integrated development environment (IDE) is Eclipse using the Android Development Tools (ADT) plug-in. Other development tools are available, including a Native Development Kit for applications or extensions in C or C++, Google App Inventor, a visual environment for novice programmers, and various cross platform mobile web applications frameworks.

It was announced in January 2014 that Chrome HTML5 web applications should become available, using a compatibility layer from the open source Apache Cordova framework to allow such applications to be wrapped in a native application shell, enabling their distribution over Google Play.



Chapter 3

3.1 Revolution in Mobile Experience

Once upon a time the only technological device that required an operating system was a personal computer, then with the arrival of smartphones things changed. Initially it was just one or two high-end mobile phones that ran on operating systems, but with the success of these particular models more and more models started using smartphone operating systems. One smartphone operating system that has truly revolutionized the whole idea of a mobile phone is Android.

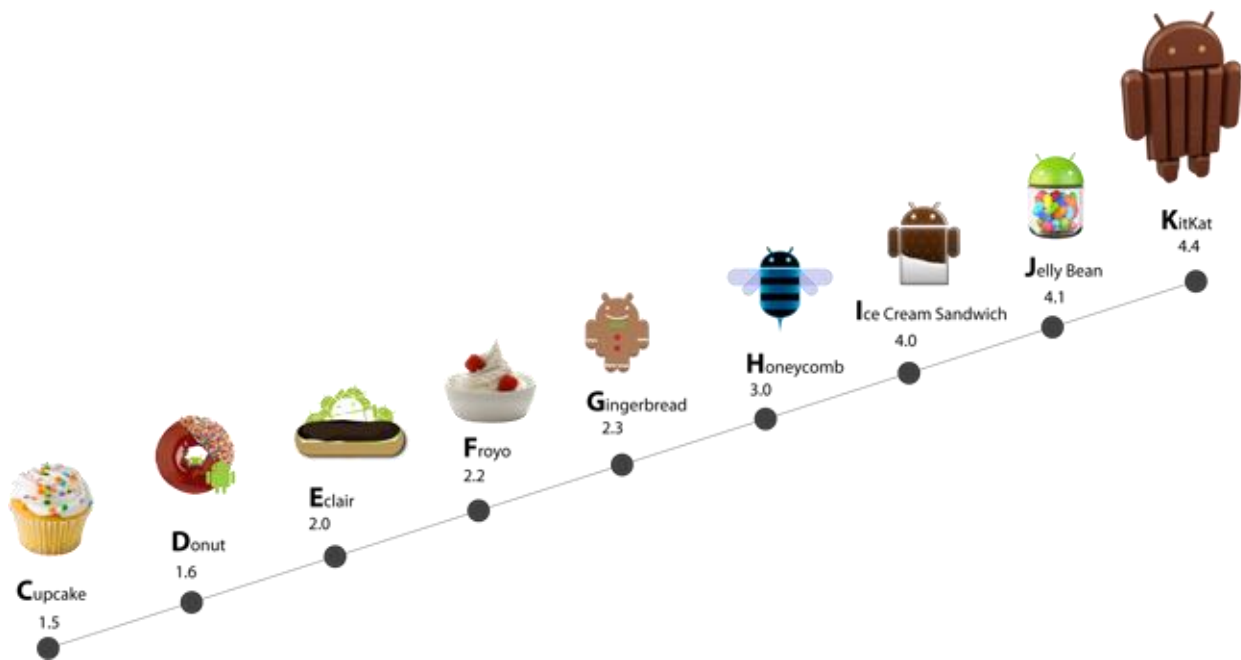


Fig 1.1: Android revolution from version Cupcake 1.5 to Kitkat 4.4

One Smartphone operating system that has truly revolutionized the whole idea of a mobile phone is Android. After the initial success of Android run phones by HTC (Dream), more and more Smartphone manufacturers joined the android project and member of the Open Handset Alliance (OHA) is increased. This resulted in Android becoming the most widely used Smartphone in the market.

The open source and licensing nature of Android allows the developers and device manufacturers to modify the software according to their needs, As a result of this constant development and innovation, Android has been adapted to work on technological devices other than smart phones.



Android phones are much more cost effective than its rivals and offer a more stimulating and fulfilling user experience makes Android a preferred choice for many users.

Worldwide Mobile Phone Sales Grew 3.6 Percent in Second Quarter of 2013

Worldwide mobile phone sales to end users totaled 435 million units in the second quarter of 2013, an increase of 3.6 percent from the same period last year, according to Gartner, Inc. Worldwide smartphone sales to end users reached 225 million units, up 46.5 percent from the second quarter of 2012. Sales of feature phones to end users totaled 210 million units and declined 21 percent year-over-year.

“Smartphones accounted for 51.8 percent of mobile phone sales in the second quarter of 2013, resulting in smartphone sales surpassing feature phone sales for the first time,” said Anshul Gupta, principal research analyst at Gartner.

Asia/Pacific, Latin America and Eastern Europe exhibited the highest smartphone growth rates of 74.1 percent, 55.7 percent and 31.6 percent respectively, as smartphone sales grew in all regions.

Worldwide Smartphone Sales to End Users by Operating System in 2013 (Thousands of Units)

Operating System	2013 2013 Market		2012 2012 Market	
	Units	Share (%)	Units	Share (%)
Android	758,719.9	78.4	451,621.0	66.4
iOS	150,785.9	15.6	130,133.2	19.1
Microsoft	30,842.9	3.2	16,940.7	2.5
BlackBerry	18,605.9	1.9	34,210.3	5.0
Other OS	8,821.2	0.9	47,203.0	6.9
Total	967,775.8	100.0	680,108.2	100.0

Table 1.1 worldwide Smartphone sales by operating system, Source: Gartner (February 2014)
<http://www.gartner.com/newsroom/id/2665715>

3.2 Platform usage

Naturally, android itself is not a single operating system. It comes in many versions with new major updates being released every half year or even more frequently. The most up-to -date chart (figure 1.2) from android Developer [AND] web site shows a distribution of android versions.

The table below provides a breakdown of Android versions, based on devices accessing Play Store as of April 1, 2014.

Version	Code name	Release date	API level	Distribution
4.4	<i>KitKat</i>	October 31, 2013	19	5.3%
4.3.x	<i>Jelly Bean</i>	July 24, 2013	18	8.9%
4.2.x		November 13, 2012	17	18.1%
4.1.x		July 9, 2012	16	34.4%
4.0.3–4.0.4	<i>Ice Cream Sandwich</i>	December 16, 2011	15	14.3%
3.2	<i>Honeycomb</i>	July 15, 2011	13	0.1%
2.3.3–2.3.7	<i>Gingerbread</i>	February 9, 2011	10	17.8%
2.2	<i>Froyo</i>	May 20, 2010	8	1.1%



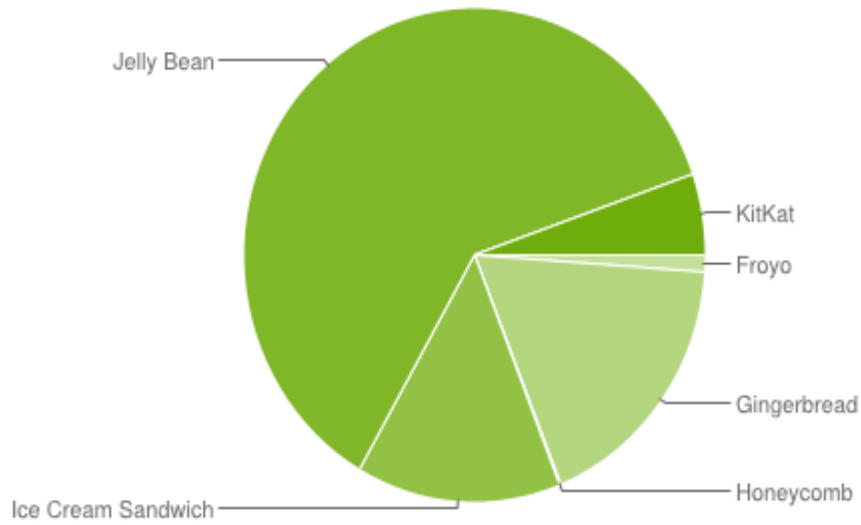


Fig 1.2: The relative no of devices accessing the play store recently and running a given version of the android platform , as of April 1, 2014.
<http://developer.android.com/about/dashboards/index.html>



Chapter 4

Android Architecture

Linux Kernel lies on the bottom of the Android Architecture and acts as an abstraction layer between the hardware and the rest of the stack. The kernel provides drivers for the different parts of the mobile phone, as well as handling the power management. Also, security, memory management, process management and network stack are handled by the Linux kernel.

Libraries provides a set of C/C++ libraries which are used by various components of the Android system. The Media Framework libraries are used to store and playback video as well as images. *SQLite* is a lightweight relationship database available for all applications. SGL are the underlying 2D graphics engine, while the 3D libraries are based on an *OpenGL ES* implementation. *LibWebCore* is a web browser engine.

All of these libraries and their capabilities are available for the developer through the Android application framework.

Android Runtime includes core libraries and the Dalvik VM, [31]. The core libraries provide most of the basic functionality available in the core libraries of the Java programming language. The Dalvik VM is written as to reduce memory footprint and enable a device to run multiple VM's effectively.



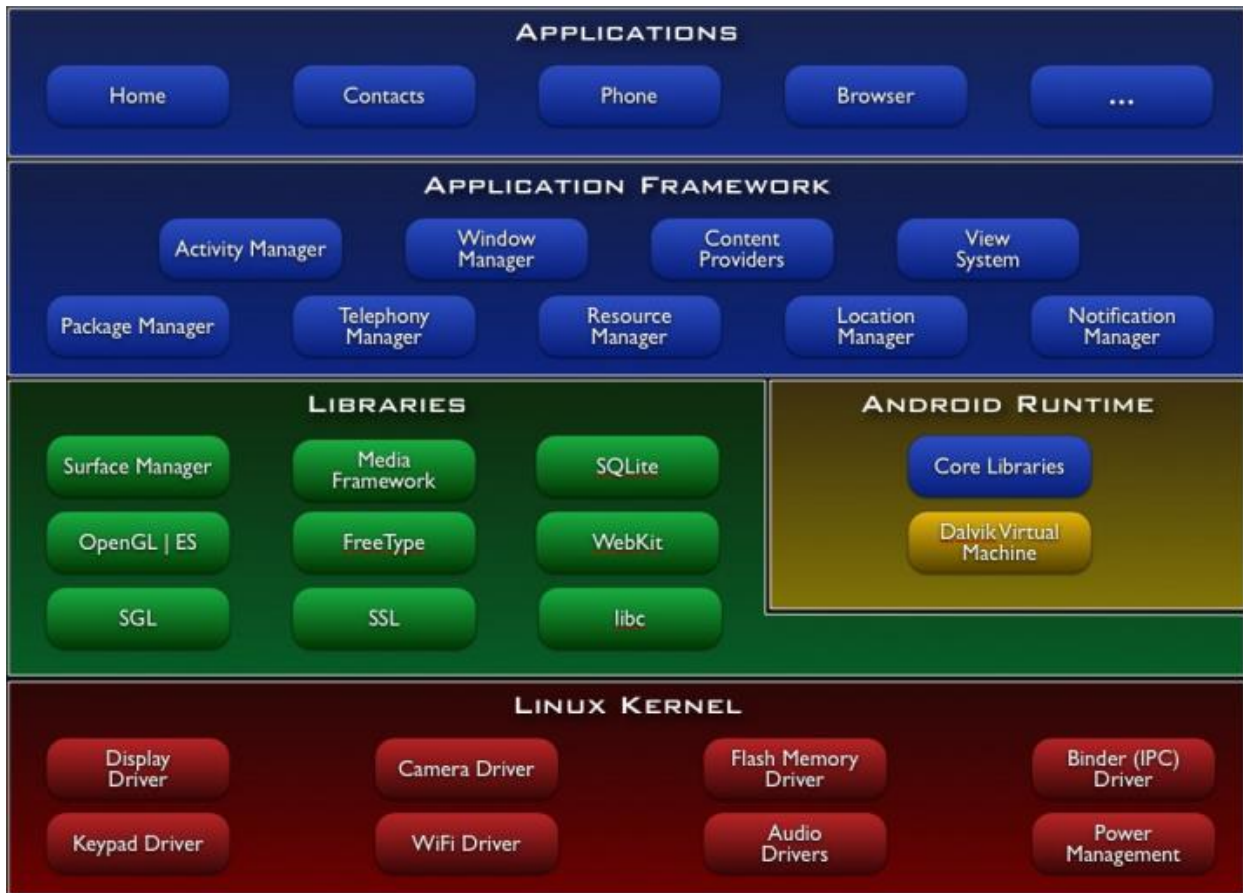


Figure 2.1 depicts the Android architecture.

The Application Framework architecture allows for reuse of components. Any application can make use of the capabilities of a component and also publish its own capabilities. Every application has underlying components, including:

- **Views** consisting of i.e buttons, lists, text boxes and a web browser, all used to build an application.
- **An Activity Manager** that controls navigation and manages the life cycle of an application.
- **A Notification Manager** that enables all applications to have notifications displayed as alerts in the status bar.
- **A Resource Manager** providing access to non-code resources such as localized strings, graphics, and layout files. etc



Chapter 5

5.1 Application Frame Work

Even through the android id a relatively new system, it comes with good documentation, Which can be found on the official development page ([AND]). There is a number of publications and course books for people who seek basic information and introduction to the system. Additionally, a very large community of developers is actively exchanging question and answer on web service like google group ([ADG]), android blog ([ADB]) or stack overflow ([ASO]). It does not make sense to quote big fragments of android developers guide. Instead, This section covers the fundamental aspects of designing an Android application which are necessary in order to understand the following discussion about TravelBD app.

5.2 Main application components

To began to program for android we need some basic, because some elements are very different , even if programming an application in Android uses the java language, therefore, an object oriented language.

All Android application contain more of the following components

5.2.1 Activity

An activity is an user interference that allows the user to interact with the screen, to perform actions. For example, a text messaging application could have an activity that displays a list of contacts to send messages. Once the contact is selected ,activity could send information to a second activity that could serve to send the message to the contact.

When an application is launched, what is displays is the result of an activity. At the code level, for create an activity; we must create a class that extend the activity class. An activity has a required on create() method. To interact with the program, through the activity, there must be something displayed, that is why the activity, contains what is called views.

5.2.2 View

A view is the basic building block for user interference components. A view occupied a rectangular area on the screen. View is the base class for the widget, which are used to create interactive UI components. There is different kinds of view, for example a ListView is able to display only an interactive list of what we want to



display, while we webview allow us to display a webpage. As said before, a view occupies a rectangular area on the screen. To organize these rectangles on the screen, there is a text file written in the XML for every different screen.

5.2.3 XML

XML means Extensible Markup Language. Android provides a straight forward XML vocabulary that corresponds to the view classes and sub classes. The goal of using Android XML vocabulary, is to quickly design UI layouts and the screen elements they contain, in the same way that creating web pages in HTML: with a series of nested elements.

5.2.4 Intent

An activity can of course start another one, even if it but to do this, it will need special object called intent. Intent is basic description of an operation to be performed. It can launch an Activity, send a broadcastintent to any interested Broadcast receiver components, and communicate with a background service. Intent performs binding between the codes indifferent applications. It can be thought of as the link between activities. It is possible to add some information to an intent, thanks to an object called bundle that we add to the intent thanks to the method.

```
Intent.putExtra(Bundle objectbundle);
```

5.3 Android Manifest

AndroidManifest.xml file is necessary for all android applications and must have this name in itsroot directory. In the manifest we can find essential information about the application for the androidsystem, information that the system must have before it can run any of the application's code. Here is what we can find in the Android manifest:

-The name of the Java package for the application. The package name serves as a unique identifier for the application.

-The description of the components of the application: the activities, services, broadcast receivers, and content providers that the application is composed of and under what conditions they can be launched.

-The process that will host application components.



-The permissions the application must have in order to access protected parts of the API and interact with other applications.

-The permissions that others are required to have in order to interact with the application's components.

-The list of the instruments classes that provide profiling and other information as the application is running. These declarations are present in the manifest only while the application is published.

-The minimum level of the Android API that the application requires.

-The list of the libraries that the application must be linked against.

With all these elements, an application can be created



Chapter 6

Snapshot and overview of Travel Bangladesh



Travel Bangladesh



This is the first screen. If you touch the click button then the next page or “MENU” page will come.





Travel Bangladesh

enjoy

Menu

Tourist Destination

Hotel & Resort

Travel Organization

Transport

Restaurant

This is the MENU page. A user can choose his desire menu button. If any user touch the “**Tourist Destination**” and the “**Hotel & Resort**” Button he will get the another MENU with some district name, touch the district and get desire information.





This is also a “MENU” page. A user can choose his desire menu button. Here the police Contact Button contain lots of police stations number as well as ASP,SI number also.





Travel Bangladesh

enjoy

Tourist Destination

Dhaka

Chittagoang

Cox's Bazar

St. Martin

Bandarban

Khagrachori

This is the Tourist Destination Menu. Where a user can select his desire district





- Sylhet
- Rangamati
- Bogra
- Dinajpur
- Rajshahi
- Kuakata

This is the Tourist Destination Menu. Where a user can select his desire district





DHAKA CITY



Dhaka is the capital of Bangladesh with its exciting history and rich culture. Known the world over as the city of Mosques, Muslin, Rickshaw and natural green beauty. It has attracted traveler most from far and near through ages. According to recorded history it was established by Buddhists in 3rd century, later dominated by Hindus, after fell in to the hand of Muslim Mughal rules in the 16th century.

If user click the Dhaka then he see some information about Dhaka and some famous travel places around Dhaka.





Chittagoang



It wasn't until the latter part of the 17th century that the Mughal excluded their empire this far and superseded the Buddhist Anabanse Kingdom of Burma (Myanmar) in Chittagong .With the collapse of Mughal power it was the British who finally overran the various local rulers, although prior to this Portuguese pirates had long preyed upon the nicks meantime trade of the region The commercial capital and the largest International seaport of Bangladesh is located 264 kms southern of Dhaka . Chittagong is the initial jumping off point for the Chittagong

If you click the “**Chittagong**” then he see some information about **Chittagong** and some famous travel places around **Chittagong**.



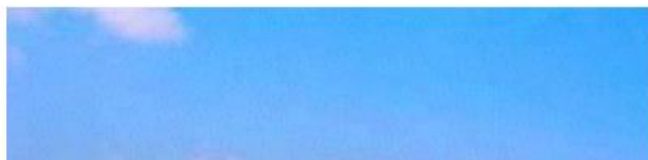


cox bazar



Cox's Bazar is located at a distance of 152km south of Chittagong. It has a total area of 2260qskm. British captain Hiram Cox in 1799 defeated the Burmese king in a battle and set up a bazar (market) here which was named “Cox's Bazar” after him. Cox's Bazar is called the Tourist Capital of Bangladesh.

Maheskhali Island



If you click the “**Cox’sBazar**” then he see some information about **Cox’sBazar** and some famous travel places around **Cox’sBazar**.





St. martin



St. Martin is the country's only coral island, named after a British Provincial Governor and called Narikel Jinjira (Coconut island) by the locals. It is one of the best places in Bangladesh . The island has two lagoons that support thick mangrove forests. A rocky platform surrounds the island and extends into the sea, the crystal clear water will allow you to see about 20 feet deep into the sea. Attractions are beaches around the island, crystal stones, coconut groves, sea crabs, turtle shells and pearls. About 2.5 hours

If you click the “**St.Martin**” then he see some information about **St.Martin** and some famous travel places around **St.Martin**.





Bandarban



The nature setting of this little township rich is tribal heritage. Its flora and fauna, bamboo cottages its ethnic peoples and their life style have made this picturesque hilly resort a popular destination of tourist. Here has the unique privilage of having two hight peaks of the country, the Keokaradang (4000feet) and the Tazingdang (4632feet).

Chimbuk hill



If you click the “**Bandarban**” then he see some information about **Bandarban** and some famous travel places around **Bandarban**.





Khagrachori



266 km by road from Dhaka and 112 km from Chittagong. The district of Khagrachhari represents the natural, wild, beauty of Bangladesh. Khagrachhari District is under Chittagong division with an area of 2699.55 sq km, is bounded by the Indian State of Tripura on the north, Rangamati and Chittagong districts on the south, Rangamati district on the east, Chittagong district and the Indian State of Tripura on the wes

Alutila Hill



If you click the “**Khagrachori**” then he see some information about **Khagrachori** and some famous travel places around **Khagrachori**.





Sylhet



Distance of Capital city of Dhaka is 264 km. There are one International Airport (domestic and international flight available in here) and another communication from Dhaka are Train and Luxurious Bus. About 80 km. from Sylhet town connected by road and rail, Srimangal, which is known as the Tea capital of Bangladesh, is the actual tea centre of the area

The Shrine of Hazrat Shah Jalal (R)



If you click the “**Sylhet**” then he see some information about **Sylhet** and some famous travel places around **Sylhet**.





Rangamati



Located Distance from Chittagong is 77 Kilometer and communications are Bus, Jeep and Microbus. Rangamati District is under Chittagong division with an area of 6116.13 sq km and bounded by the Tripura State of India on the north, Bandarban district on the south, Mizoram State of India and Chin State of Myanmar on the east, Khagrachhari and Chittagong districts on the west. Annual average temperature: maximum 34.6°C, minimum 13.4°C; annual rainfall 3031mm.

Hanging Bridge

If you click the “**Rangamati**” then he see some information about **Rangamati** and some famous travel places around **Rangamati**.





Bogra



Bogra is a town, and one of the oldest towns in northern Bangladesh. It is a centre of commerce and trade within the Bogra District and located under the Rajshahi Division. Bogra is sometimes described as the nerve centre of Northern Bangladesh.

Mahasthangarh



If you click the “**Bogra**” then he see some information about **Bogra** and some famous travel places around **Bogra**.





Dinajpur



Dinajpur (Bengali: দিনাজপুর) is a town in northern Bangladesh. It is located in the Dinajpur District, near the capital city of Rangpur Division and has a population of 186,727.

Ram Sagar



If you click the “**Dinajpur**” then he see some information about **Dinajpur** and some famous travel places around **Dinajpur**.





Rajshahi



one of the largest division in Bangladesh . Rajshahi division is overwhelmingly agricultural. It is the center of the silk industry. This region is very famous for mangoes, Lichies. For travelers, the region offers a Variety of historical monuments, including numerous mosques, Hindu temples, Rajbaris (Palaces), and British – Era buildings. Built on the northern bank of the Padma River.

Paharpur



If you click the “**Rajshahi**” then he see some information about **Rajshahi** and some famous travel places around **Rajshahi**.





Kuakata



Kuakata is a beautiful place of the southern part of Bangladesh which is sometimes called as “the daughter of the Sea”. This 30 kilometers long beach is situated at Lotachapli union of Kalapara thana, which is in Patuakhali district of Barisal division. Kuakata is 70 kilometers away from Patuakhali Sadar and 320 kilometers away from Dhaka city.

Traveling Fatra forest

Fatra forest is near Kuakata. This is

If you click the “**Kuakata**” then he see some information about **Kuakata** and some famous travel places around **Kuakata**.





Hotel Motel & Resort List

Ware Garden Radisson



Accommodation: Deluxe US\$ 230-250 /
/ Rates are subject to 10% service
charge and 15% VAT

Address : Airport Road, Dhaka
Cantonment, Dhaka-1206

Washington Hotel



If you click the “**Hotel and Resort**” button then come a menu where you see some district name. Each district contains some **hotel and resort** information. If you click the Dhaka Button then you see some information about hotel and resort of Dhaka





Hotel Motel & Resort List of Chittagoang

Peninsula Hotel



RoomTariff: Deluxe- US\$ 130, Executive Twin US\$ 150, Super Deluxe US\$ 160, Suite US\$ 300

Address: Bulbul Center, 486/B, O.R. Nizam Road, CDA Avenue, Chittagong 4000, Bangladesh.

If you click the “Chittagong” Button then you see some information about hotel and resort of “Chittagong”





Hotel Motel & Resort List of Cox Bazar

Uni Resort



Accommodation: Deluxe BDT 2,000-2,500/-, Suite BDT 4,000-4,500/- Excludes 15% vat and 5% service charge.

Address : Kalatali, Cox's Bazar

Praasad paradise



If you click the “**Cox’s Bazar**” Button then you see some information about hotel and resort of “**Cox’s Bazar**”





Hotel Motel & Resort List of st-martin

Somudrapuri Resort



Accommodation: BDT 1500-2,000/-
inclusive vat & service charge


Address: Delpara, Narikel Zingira,
Saint Martin

Shemana Periya Resort



If you click the “**St.Martin**” Button then you see some information about hotel and resort of “**St.Martin**”



 Saving screenshot...

Hotel Motel & Resort List of Bandarban

Nilgiri Resort



Accommodation: BDT 2,500-5,500/-
Including vat & service charge

Address: Nilgiri, Bandarban.

Hotel Plaza



If you click the “**Bandarban**” Button then you see some information about hotel and resort of “**Bandarban**”





Hotel Motel & Resort List of Rangamati

Hotel Sufia



Accommodation: Ac BDT 1,700 - BDT 2,750/-, Non Ac BDT 1200 - BDT 1,450/-

Address : Fire Service Station Road, Rangamati.

hotel green castle



If you click the “**Rangamati**” Button then you see some information about hotel and resort of “**Rangamati**”



Hotel Motel & Resort List of Sylhet

Hotel Dallas



Room Tarif:

Twin Deluxe : BDT 1300 | US\$ 19, **Family Economy** BDT 1200 | US\$ 18, **Family Delux** BDT 1500 | US\$ 21, **Probashi Suit** BDT 5000 | US\$ 70, **Honeymoon Suit** BDT 4000 | US\$ 56

Address: Jail Road, Sylhet

If you click the “Sylhet” Button then you see some information about hotel and resort of “Sylhet”



Saving screenshot...

Hotel Motel & Resort List of Bogra

Hotel Naz garden



Accommodation: Standard BDT 2,250 – 2,800/-, Deluxe BDT 4,000- 5,500/-
Exclude 15% vat & 10% service charge

Address: Silimpur, Naz garden, Bogra

Hotel Castle Soad



If you click the “**Bogra**” Button then you see some information about hotel and resort of “**Bogra**”





Travel Organization

ORGANIZATION
BD TOURS K Zaman khan (C.E.O.) House:175 (2nd Fl), Road : 02, New DOHS, Mohakhali, Dhaka-1206 Tel: +8802 8715112, 8715112, Cell: +8801715492680, +8801926674074 E-mail: toursbd@gmail.com , info@bd-tours.com www.bd-tours.com
KUSHIARA TOURISM LIMITED

if you touch the “Travel Organization” button then you get some travel organization name, contact no, email and website name.

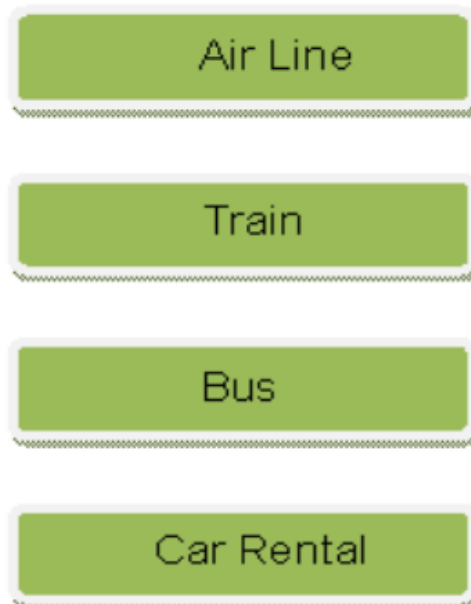




Travel Bangladesh

enjoy

Transport



If you touch the “**Transport**” button then you get Transport Menu With some sub menu. Which contain “Air Line” “**Train**” “**Bus**” And “**Car Rental**”. If you touch any of these buttons you get some information about Transport.





Airlines

Biman Bangladesh Airlines Ltd.

Balaka Bhaban, Kurmitola, Dhaka

Tel: 8914771, 8917400-19 (H.O)
9560151, 9559610, Fax: 8913005

Mail: passengersales@bdbiman.com

United Airways (BD) Ltd.

Uttara Tower (5th Floor) 1
Jasimuddin Avenue Sector-3, Uttara,
Dhaka-1230

Tel: 8963191, 8957640

E-Mail: info@uabdl.com

If you touch the **Airlines** button you get the information about Air Lines



Train

RESERVATION & ENQUIRY

DHAKA (KAMLAPUR) BTTB	+8802 9358634, 8315857, 9331822, +88 01711691612 Pizus
CHITTAGONG BTTB	+88031 635162 Station Manager +88 01711691550
SYLHET BTTB	+880821 717036 Station Manager- +8801711691656
RAJSHAHI BTTB	+880721 776040
KHULNA BTTB	+88041 723222, +8801711 405680

If you touch the “**Train**” button you get the information about Bangladesh Railway



Bus

Shohag Paribhan (Pvt) Ltd

114, Malibagh D.I.T. Road, Dhaka

Tel: 9334152, 8316766, 8126293

Keya Paribahan

167/1, Motijheel Circular Road,
Arambagh Dhaka

Tel: +8802 7101894, 9121280

Silk Line

167/8, Circular Road,
Arambagh, Dhaka, Tel: +8802
7102461

If you touch the “**Bus**” button you get the information about Bus service





Saving screenshot...

Car Rental

BTD RENT A CAR

House: 175, 2nd Fl, New DOHS,
Mohakhali, Dhaka

Tel: +88 02 8712104

Cell: +8801926674076

Mail: info@btd.com.bd

National Logistics

House#1/B, Road#3, South Avenue,
Gulshan-1, Dhaka, Tel: 8824316

Mail: nl_bd2004@yahoo.com

DhakaTours Rent-A-Car

Association Shahbag, Dhaka

Tel: 9663134. 8611313

If you touch the “Car Rental” button you get the information about Car Rent and address and contact no.





Restaurants

Bashmati Restaurant

59/1, Purana Paltan, Dhaka
Tel : 9562773

Chilis

House 2, Road 11
Dhanmondi, Dhaka
Tel: 9121235

Emmanuelles

3/7, Kemal Ataturk Avenue
Gulshan-2, Dhaka
Tel: 0171-955559, 9862306
E-mail: emm@dhaka.net

If you touch the “**Restaurants**” button you get the information about Dhaka city Restaurants.



Spot **Picnic**

PICNIC SPOT With Picnic Package	
ARANNOBASH	Per person Picnic Package cost:
<p>Location : Balisara, Pubail,Gazipur</p> <p>Capacity : 200 above (for day long picnic)</p> <p>Distance : 30 km. from Dhaka, Total Area : 05 acres</p> <p>Details : Visit Natural Green Environment, Play Ground, Good Security, 5 cottage, Wash room-4, field, kids zone, ponds,Dinning space</p> <p>Sales Counter: Tel: 8712104, 8715112,Cell: 01780337777 E-mail: info@btd.com.bd</p>	<p>Tk.1,799/-</p> <p>Minimum Group Size: 100+</p> <p>Inclusive: Non ac transportation, Breakfast, Lunch, Evening snacks & picnic spot rent with fresh up rooms.</p>

If you touch the “Picnic Spot” button you get the information about picnic organization name, contact no, email and spot price.



Travel Bangladesh

পদবী / বিভাগ / জেলা স্থানসমূহ মোবাইল নাম্বার
IGP.POLICE দপ্তরে ঢাকা 1713373000
অতিরিক্ত, আইজিপি (প্রশাসন), পুলিশ দপ্তরে ঢাকা
1713373001
অতিরিক্ত, আইজিপি (Trining), পুলিশ দপ্তরে
ঢাকা 1713373002
অতিরিক্ত, আইজিপি (এফ ডি) পুলিশ দপ্তরে ঢাকা
1713373003
ডিআইজি (একটি ডি), পুলিশ দপ্তরে ঢাকা
1713373004
ডিআইজি (এফ ডি), পুলিশ দপ্তরে ঢাকা
1713373005
ডিআইজি (rm & টি), পুলিশ দপ্তরে ঢাকা
1713373006
ডিআইজি (ক্রাইম) ঢাকা 1713373007
AIG (সংস্থাপন), পুলিশ দপ্তরে ঢাকা 1713373008
AIG (ফিন্যান্স), পুলিশ দপ্তরে ঢাকা 1713373009
AIG (Confidential) পুলিশ দপ্তরে ঢাকা
1713373010
AIG (ই & টি), পুলিশ দপ্তরে ঢাকা 1713373011
AIG (আর & এম) পুলিশ দপ্তরে ঢাকা
1713373012
AIG (সরবরাহ) পুলিশ দপ্তরে ঢাকা 1713373013
AIG (সিকিউরিটি সেল) পুলিশ দপ্তরে ঢাকা

If you touch the **“Police contact no”** button you get the contact no of Bangladesh police.





This is an android application about Bangladesh Travel. Which support only android device 4.4 or above.

Reference Link:

<http://www.btd.com.bd/>

<http://en.wikipedia.org/wiki/Bogra>

<http://en.wikipedia.org/wiki/Dhaka>

<http://en.wikipedia.org/wiki/Rajshahi>

<http://en.wikipedia.org/wiki/Dinajpur>

<http://en.wikipedia.org/wiki/cox'sbazar>

<http://en.wikipedia.org/wiki/sundorbon>

<http://en.wikipedia.org/wiki/st.martin>

<http://en.wikipedia.org/wiki/Rangamati>

Contact Me:

If you touch the “**About apps**” button you get the information about apps.



HTML code for Welcome Page

```
<!DOCTYPE html PUBLIC "-//W3C//DTD XHTML 1.0 Transitional//EN"
"http://www.w3.org/TR/xhtml1/DTD/xhtml1-transitional.dtd">
<html xmlns="http://www.w3.org/1999/xhtml">
<head>
<meta http-equiv="Content-Type" content="text/html; charset=iso-8859-1" />
<title>index</title>
<link href="jquery.mobile.custom/jquery.mobile.custom.theme.css" rel="stylesheet"
type="text/css" />
<style type="text/css">
<!--
a:link {
    text-decoration: none;
    color: #009966;
}
a:visited {
    text-decoration: none;
}
a:hover {
    text-decoration: none;
}
a:active {
    text-decoration: none;
}
body,td,th {
    color: #000000;
}
body {
    background-color: #FFFFFF;
}
.style13 {
```



```

        color: #990000;

        font-weight: bold;

        font-size: 2em;

        font-family: "Courier New", Courier, monospace;
    }
-->
</style>

</head>

<body>
<p align="center" class="style13">Travel Bangladesh </p>

<p align="center"></p>

<p align="center">&nbsp;</p>

<p align="center"><a href="Menu.html"></a></p>

</body>

</html>

```




```

<p align="center" class="style3"><a href="Restaurants.html"></a></p>
<p align="center" class="style3"><a href="picnic spot.html"></a></p>
<p align="center" class="style3"><a href="help.html"></a></p>
<p align="center" class="style3"><a href="about apps.html"></a></p>
<p align="center" class="style3">&nbsp;</p>
<p align="center" class="style3">&nbsp;</p>
<p align="center"><a href="Tourist Destination.html"></a></p>
<p align="center"><a href="Hotel & Resturent.html"></a></p>
<p align="center"><a href="TDAB.html"></a></p>
<p align="center"><a href="transport.html"></a></p>
<p align="center"><a href="Restaurants.html"></a></p>
<p align="center"><a href="picnic spot.html"></a></p>
<p align="center"><a href="help.html"></a></p>
<p align="center"><a href="about apps.html"></a></p>
<p align="center">&nbsp;</p>
<p align="center">&nbsp;</p>
<p>&nbsp;</p>
</body>
</html>

```



Main activity.java

```
import android.os.Bundle;

import org.apache.cordova.*;

public class MainActivity extends DroidGap {

    @Override
    public void onCreate(Bundle savedInstanceState) {

        super.onCreate(savedInstanceState);

        super.loadUrl(Config.getStartUrl());
    }
}
```



Android manifest Editor

```
<?xml version="1.0" encoding="utf-8"?>
<manifest xmlns:android="http://schemas.android.com/apk/res/android"
    package="com.example.bdtravel"
    android:versionCode="1"
    android:versionName="1.0" >

    <uses-sdk
        android:minSdkVersion="8"
        android:targetSdkVersion="18" />
    <supports-screens
        android:largeScreens="true"
        android:normalScreens="true"
        android:smallScreens="true"
        android:resizeable="true"
        android:anyDensity="true" />
    <uses-permission android:name="android.permission.VIBRATE" />
    <uses-permission android:name="android.permission.ACCESS_COARSE_LOCATION"
    />
    <uses-permission android:name="android.permission.ACCESS_FINE_LOCATION" />
    <uses-permission
        android:name="android.permission.ACCESS_LOCATION_EXTRA_COMMANDS" />
    <uses-permission android:name="android.permission.READ_PHONE_STATE" />
    <uses-permission android:name="android.permission.INTERNET" />
    <uses-permission android:name="android.permission.RECEIVE_SMS" />
    <uses-permission android:name="android.permission.RECORD_AUDIO" />
    <uses-permission android:name="android.permission.MODIFY_AUDIO_SETTINGS" />
    <uses-permission android:name="android.permission.READ_CONTACTS" />
    <uses-permission android:name="android.permission.WRITE_CONTACTS" />
    <uses-permission android:name="android.permission.WRITE_EXTERNAL_STORAGE"
    />
    <uses-permission android:name="android.permission.ACCESS_NETWORK_STATE" />
    <uses-permission android:name="android.permission.GET_ACCOUNTS" />
    <uses-permission android:name="android.permission.BROADCAST_STICKY" />

    <application
        android:allowBackup="true"
        android:icon="@drawable/ic_launcher"
        android:label="@string/app_name"
```




```
    android:theme="@style/AppTheme" >
    <activity
        android:name="com.example.bdtravel.MainActivity"
        android:label="@string/app_name" >
        <intent-filter>
            <action android:name="android.intent.action.MAIN" />

            <category android:name="android.intent.category.LAUNCHER" />
        </intent-filter>
    </activity>
</application>

</manifest>
```



Bibliography

[ADB] Android Developers Blog

<http://android-developers.blogspot.com/>

[ADG] Android Developers Group

[http:// groups.google.com/group/android-developers](http://groups.google.com/group/android-developers)

[AND] Android Developers

<http://developers.android.com>

<http://w3schools.com>

<http://www.btd.com.bd/>

<http://en.wikipedia.org/wiki/Bogra>

<http://en.wikipedia.org/wiki/Dhaka>

<http://en.wikipedia.org/wiki/Rajshahi>

<http://en.wikipedia.org/wiki/Dinajpur>

<http://en.wikipedia.org/wiki/cox'sbazar>

<http://en.wikipedia.org/wiki/sundorbon>

<http://en.wikipedia.org/wiki/st.martin>

<http://en.wikipedia.org/wiki/Rangamati>

<http://www.gartner.com/newsroom/id/2665715>

