

# **ANDROID APPLICATION DEVELOPMENT PROJECT REPORT**

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# **ACKNOWLEDGMENT**

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Finally, yet importantly, I would like to express my heartfelt thanks to my beloved parents for their blessings, my friends and batch mates for their help and wishes for successful completion of this project.

**Kshitij Gautam**

# **CERTIFICATE**

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# ABOUT THE INSTITUTION

CMC Limited is an information technology services, consulting and software company. It was incorporated on 26 December 1975, as the 'Computer Management Corporation Private Limited'.



'Project Interact' (International Education and Research for Applications of Computer Technology), a United Nations project involving design, development and systems engineering, computer-based systems applications in the areas of power distribution, railway freight operations management and meteorology transitioned the company to a broad IT solutions provider.

CMC Limited designed and deployed the Indian Railways Reservation System IMPRESS (Integrated Multi-train Passenger Reservation System) in New Delhi on 15 October 1985. It was eventually deployed all over India serving over half a million transactions every single day and cutting wait times for passengers drastically. CMC also followed it up with the design of ARTS (Advanced Railway Ticketing System) for unreserved ticketing.

# INTRODUCTION

Android is a mobile operating system developed by Google, based on the Linux kernel and designed primarily for touchscreen mobile devices such as smartphones and tablets.

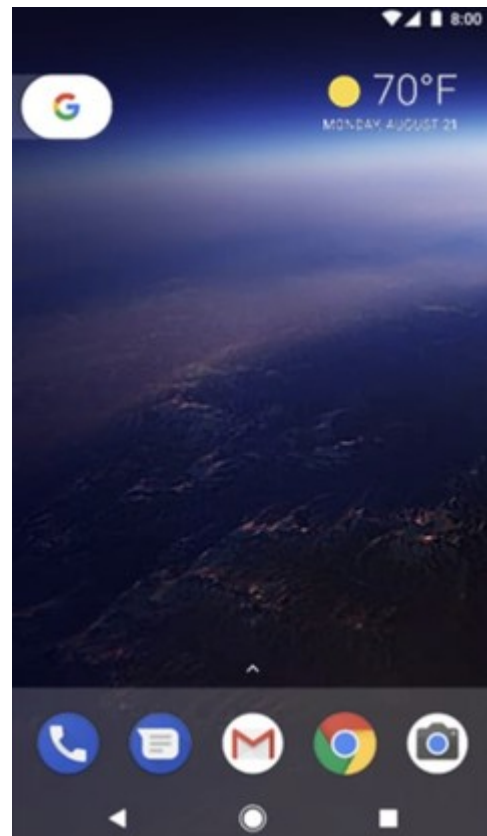


Android's user interface is mainly based on direct manipulation, using touch gestures that loosely correspond to real-world actions, such as swiping, tapping and pinching, to manipulate on-screen objects, along with a virtual keyboard for text input. In addition to touchscreen devices, Google has further developed Android TV for televisions, Android Auto for cars, and Android Wear for wrist watches, each with a specialized user interface. Variants of Android are also used on game consoles, digital cameras, PCs and other electronics.

Initially developed by Android Inc., which Google 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. Beginning with the first commercial Android device in September 2008, the operating system has gone through multiple major releases, with the current version being 8.0 "Oreo", released in August 2017. Android applications

("apps") can be downloaded from the Google Play store, which features over 2.7 million apps as of February 2017. Android has been the best-selling OS on tablets since 2013, and runs on the vast majority of smartphones. As of May 2017, Android has two billion monthly active users, and it has the largest installed base of any operating system.

Android's source code is released by Google under an open source license, although most Android devices ultimately ship with a combination of free and open source and proprietary software, including proprietary software required for accessing Google services. Android is popular with technology companies that require a ready-made, low-cost and customizable operating system for high-tech devices. Its 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 deliver updates to older devices, add new features for advanced users or bring Android to devices originally shipped with other operating systems. The extensive variation of hardware in Android devices causes significant delays for software upgrades, with new



versions of the operating system and security patches typically taking months before reaching consumers, or sometimes not at all. The success of Android has made it a target for patent and copyright litigation between technology companies.

## **ANDROID VERSIONS**

### **Cupcake 1.5**



### **Froyo 2.2**



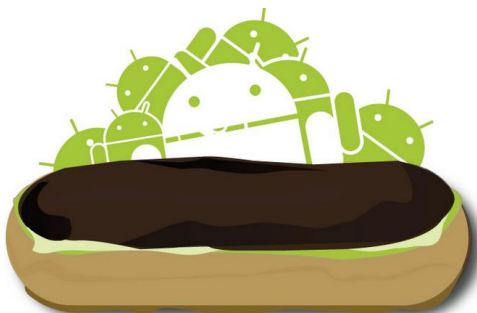
### **Donut 1.6**



### **Gingerbread 2.3**



### **Eclair 2.0**



### **Honeycomb 3.0**





## Ice Cream Sandwich 4.0



## Marshmallow 6.0



## Jelly Bean 4.1



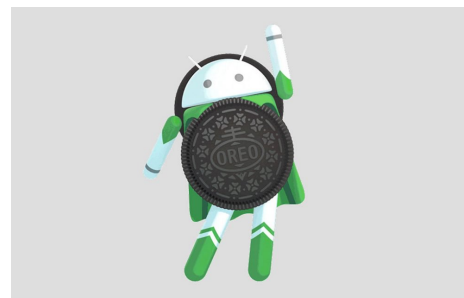
## Nougat 7.0



## KitKat 4.4



## Oreo 8.0



## Lollipop 5.0



# **PROJECT - WALLET APP**

## **OVERVIEW**

**This Android project is an android application which implements a Wallet App. Android framework and SQLite are used to develop an app which provides an in-app cash wallet which can be use to pay other people, pay for services or book services. An Administration section has been provided to add new users and services. A Sign-up page for existing users and a page for existing users to change password is also provided.**

## **TECHNOLOGIES USED**

- **ANDROID**
- **SQLite**

## **SOFTWARE USED**

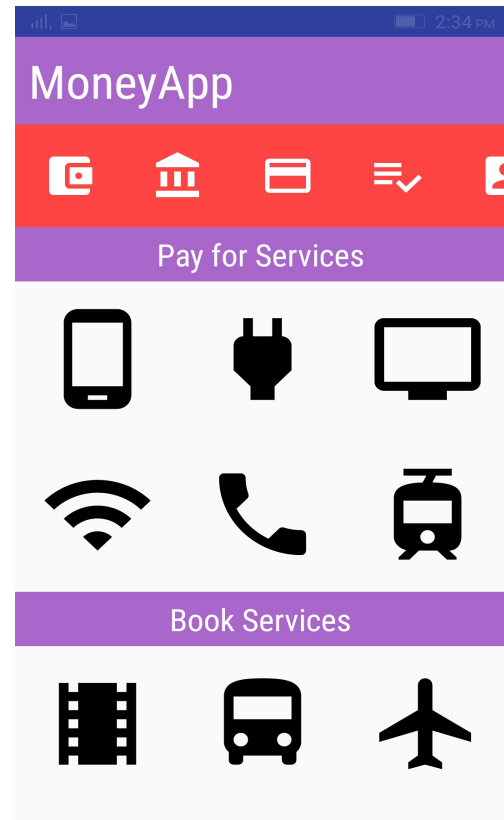
- **• ANDROID STUDIO**

## **FEATURES**

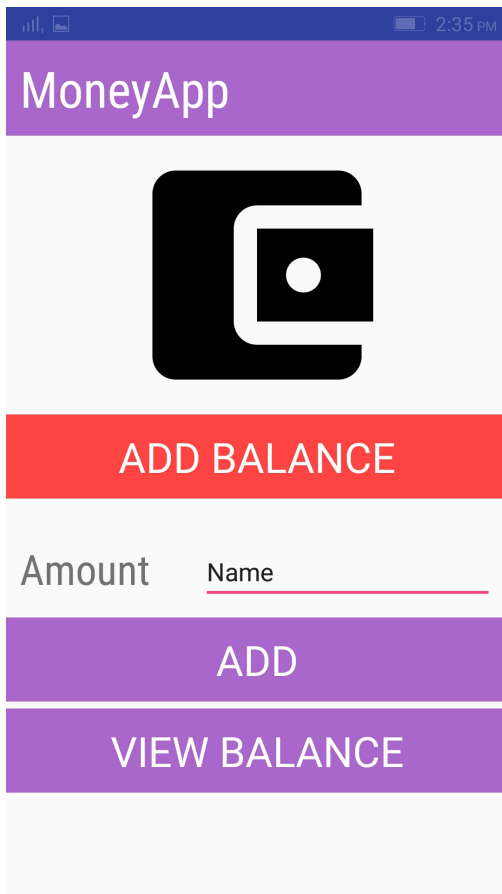
- **Simple and Efficient Functioning.**
- **Ease of Accessibility.**
- **Data Security and User Sessions.**
- **Efficient and Fast Data Management.**
- **Design Simplicity.**

# SCREENSHOTS

**App Home providing various options and services.**

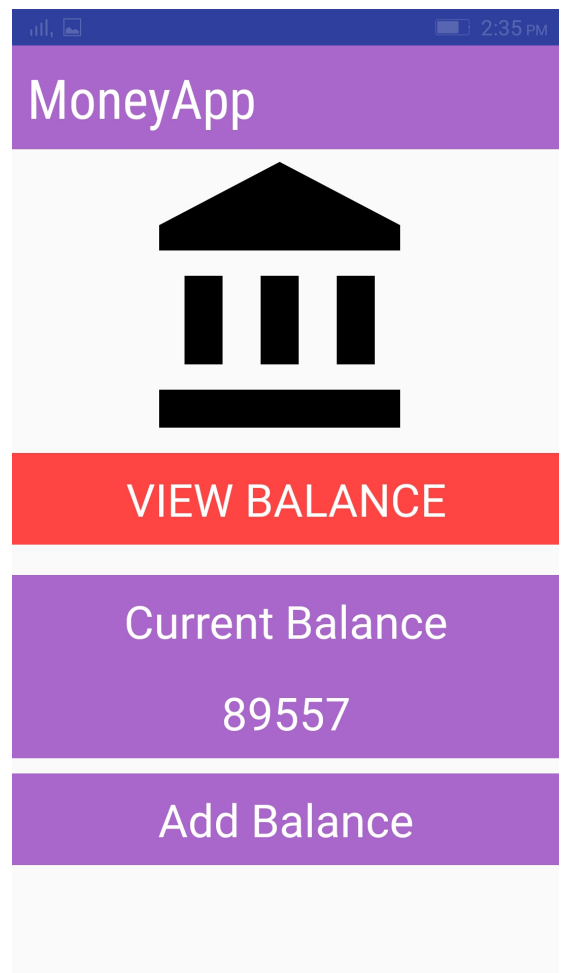
A screenshot of the MoneyApp login screen. The app has a purple header with the title "MoneyApp". Below the header is a light gray login form. The form contains two input fields: "Username" with a sub-label "Name" and "Password" with a sub-label "Password". Both input fields have a pink underline. At the bottom of the form are two gray buttons: "NEW USER" and "LOGIN".

**Login Activity to log into the app.**

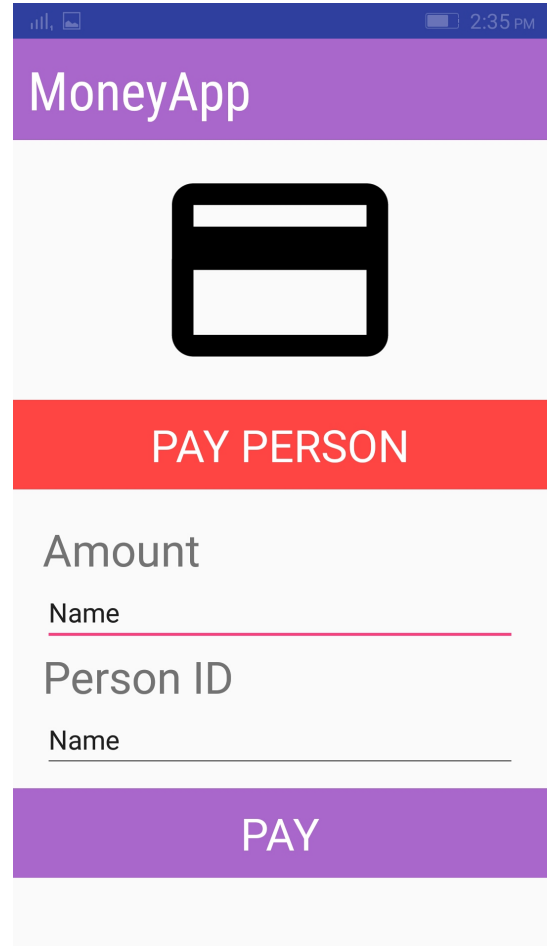


**Add Balance Activity to add balance to the account.**


**View Balance Activity to view account balance.**



**Pay Person Activity to pay other users.**



MoneyApp



**PAY PERSON**

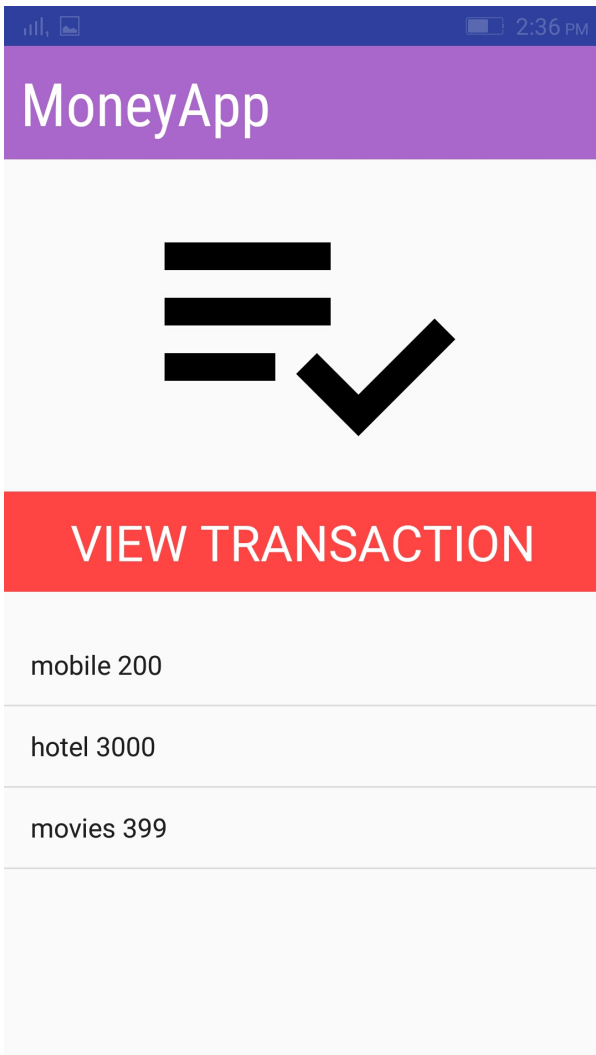
Amount

Name

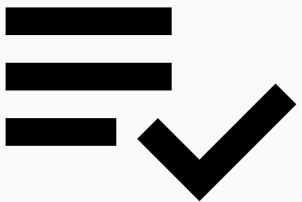
Person ID

Name

**PAY**



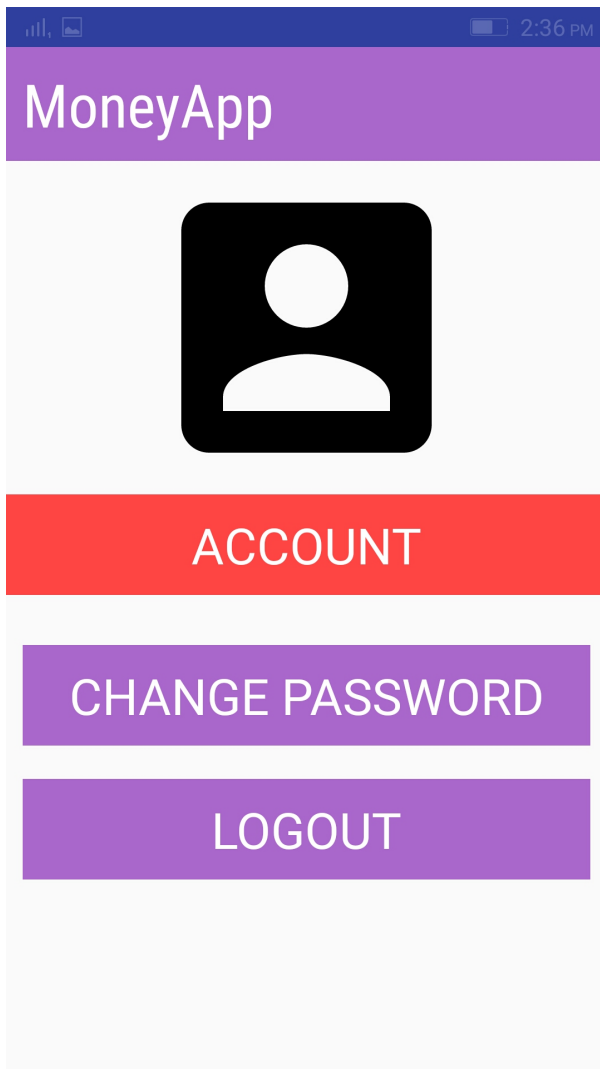
MoneyApp



**VIEW TRANSACTION**

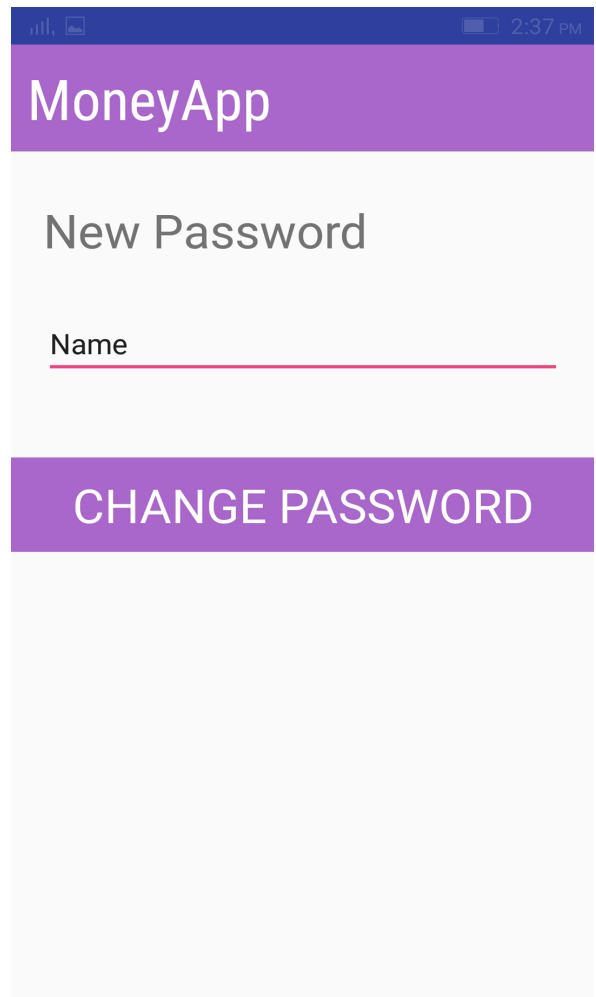
mobile 200
hotel 3000
movies 399

**View Transaction Activity to view transactions.**

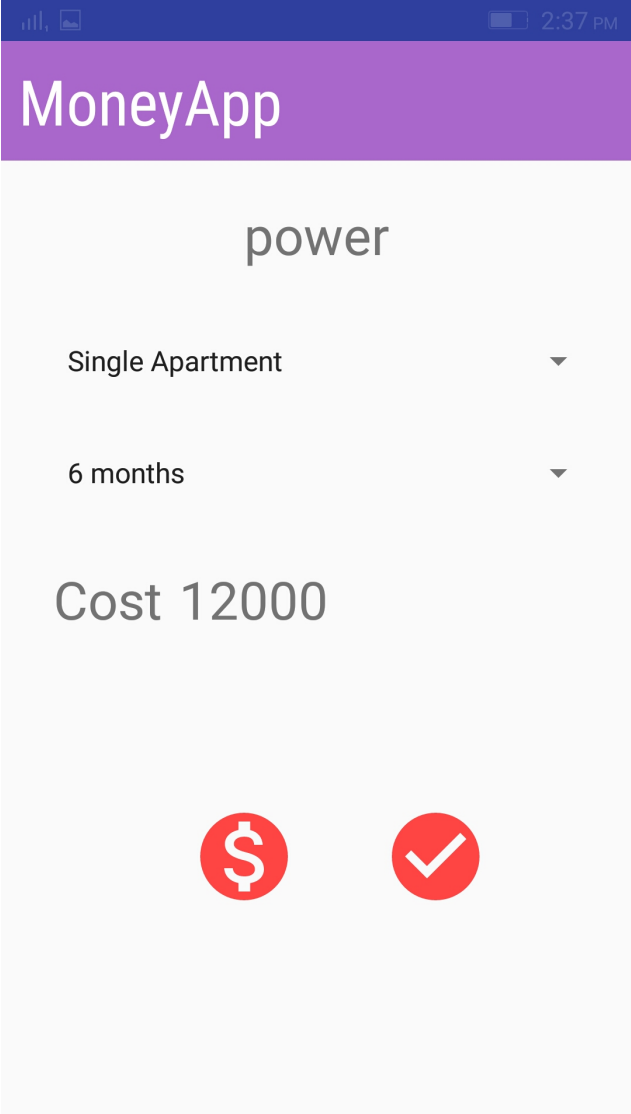


**Account Activity to  
view account  
information.**

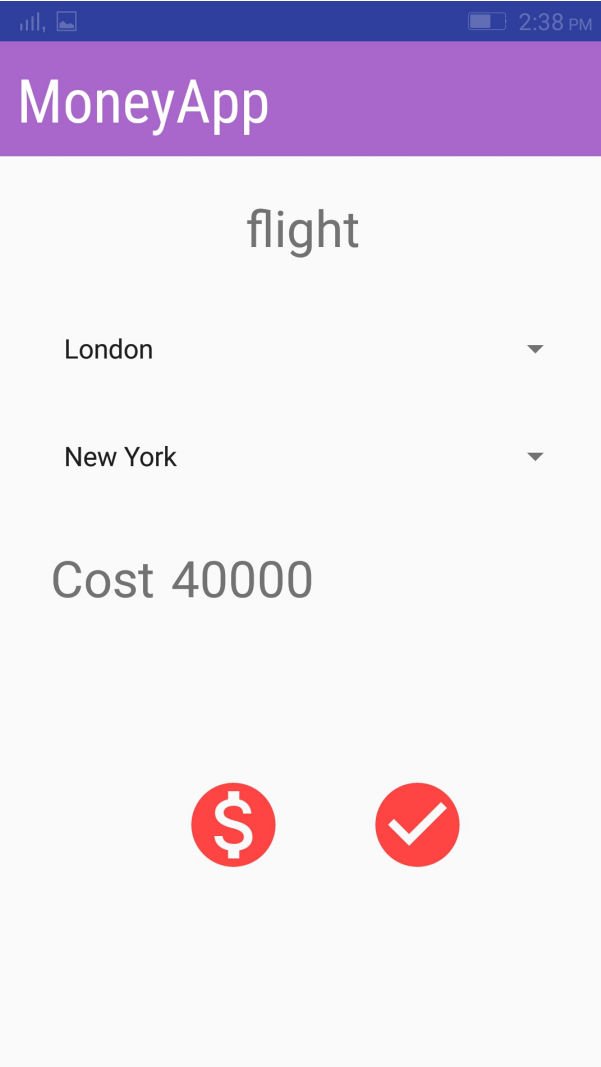
**Change password activity  
to change password**



**Activity to pay for power services.**

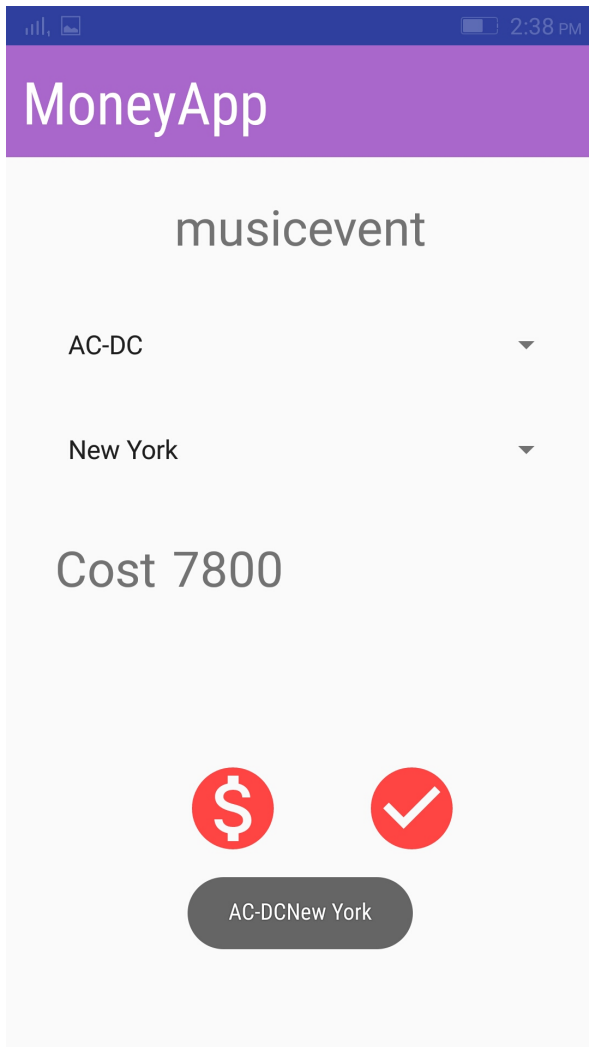


The screenshot shows the MoneyApp interface for power services. At the top, there is a status bar with signal strength, battery level, and the time 2:37 PM. Below the status bar is a purple header with the text "MoneyApp". The main content area has a light gray background. At the top of the main area, the word "power" is displayed in a large, dark gray font. Below "power", there are two dropdown menus. The first dropdown menu is labeled "Single Apartment" and has a downward arrow. The second dropdown menu is labeled "6 months" and also has a downward arrow. Below the dropdown menus, the text "Cost 12000" is displayed in a large, dark gray font. At the bottom of the screen, there are two red circular icons: a dollar sign (\$) and a checkmark (✓).



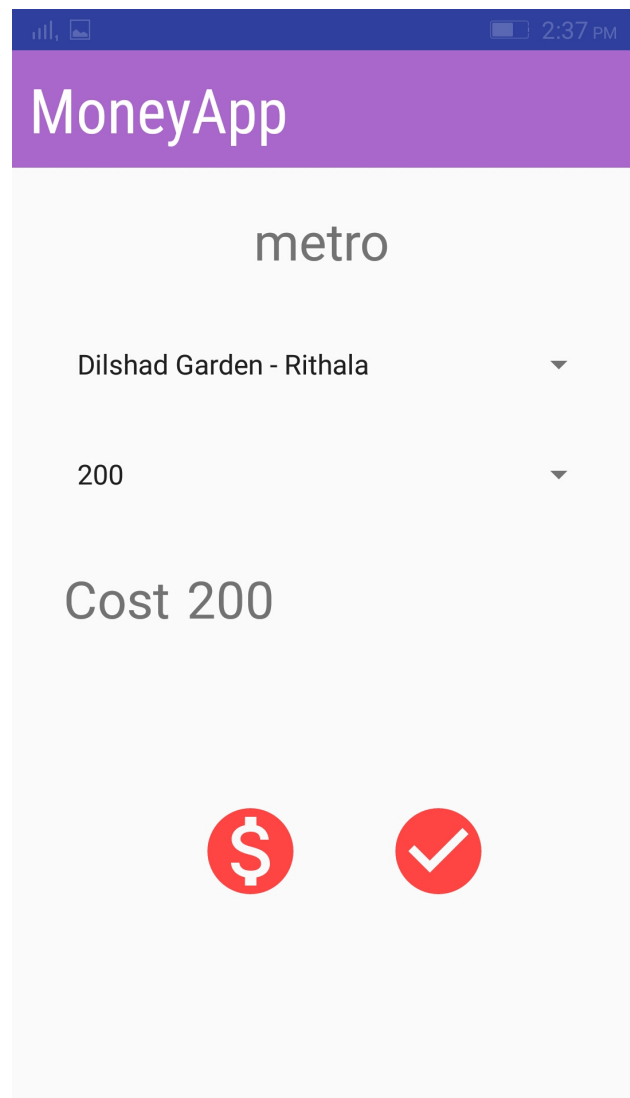
The screenshot shows the MoneyApp interface for flight services. At the top, there is a status bar with signal strength, battery level, and the time 2:38 PM. Below the status bar is a purple header with the text "MoneyApp". The main content area has a light gray background. At the top of the main area, the word "flight" is displayed in a large, dark gray font. Below "flight", there are two dropdown menus. The first dropdown menu is labeled "London" and has a downward arrow. The second dropdown menu is labeled "New York" and also has a downward arrow. Below the dropdown menus, the text "Cost 40000" is displayed in a large, dark gray font. At the bottom of the screen, there are two red circular icons: a dollar sign (\$) and a checkmark (✓).

**Activity to pay for flight services.**



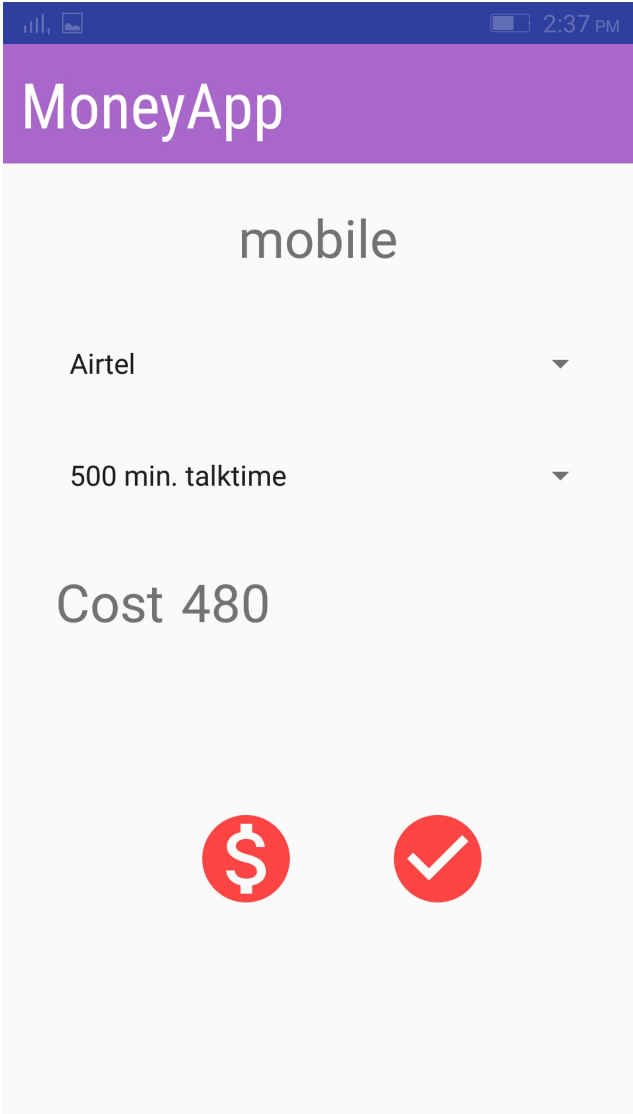
**Activity to pay for music services.**

**Activity to pay for metro services.**

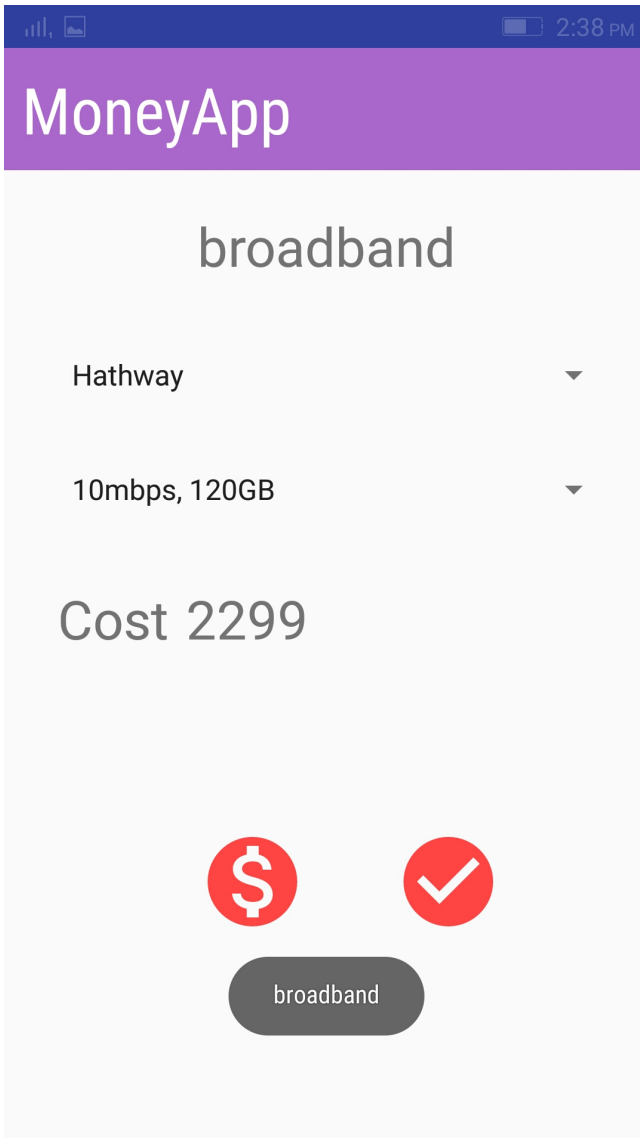




**Activity to pay for  
mobile services.**



The screenshot shows the MoneyApp interface for mobile services. At the top is a purple header with the 'MoneyApp' logo. Below it, the word 'mobile' is displayed in a large, grey font. Underneath, there are two dropdown menus: the first is labeled 'Airtel' and the second is labeled '500 min. talktime'. Below these menus, the text 'Cost 480' is shown. At the bottom of the screen, there are two red circular icons: one with a white dollar sign (\$) and one with a white checkmark.



The screenshot shows the MoneyApp interface for broadband services. At the top is a purple header with the 'MoneyApp' logo. Below it, the word 'broadband' is displayed in a large, grey font. Underneath, there are two dropdown menus: the first is labeled 'Hathway' and the second is labeled '10mbps, 120GB'. Below these menus, the text 'Cost 2299' is shown. At the bottom of the screen, there are two red circular icons: one with a white dollar sign (\$) and one with a white checkmark. Below these icons is a dark grey button with the word 'broadband' in white text.

**Activity to pay for  
broadband services.**

MoneyApp

### Add Users

Username

Name

Password

Name

Balance

Name

ADD

### Add Services

Service

mobile

**Admin Activity to add users and services.**

MoneyApp

Name

ADD

### Add Services

Service

mobile

Object1

Name

Object2

Name

Cost

Name

ADD

# **FURTHER IMPROVEMENTS**

- **Inclusion of more services.**
- **Inclusion of NFC payment procedures.**

# REFERENCES

- [\*\*http://en.wikipedia.org/\*\*](http://en.wikipedia.org/)
- [\*\*http://developer.android.com\*\*](http://developer.android.com)

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