University of Palestine

Faculty of Information Technology

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Mobi-Library:

A Mobile Application for Borrowing Books from the

Library of University of Palestine

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Abstract

In the University of Palestine the students facing problems in the process of searching and borrowing books from the library. When they tries to do research and takes some references of their projects.

At the "Mobi-Library" we solve some problems through develop an Application, where the students will do their research and borrow books by the Name of book and have information if the books are available in the database of the library.

In the application we used the Extreme Programming (XP) Methodology. XP is a system of practices that a community of software developers is evolving to address the problems of quickly delivering quality software and then evolving it.

After we finish the mobile application, we do some research to some students that attends the library of the university at the time of research and they were a total of 30 Students. 20 of them were usually goes to the library. And 15 of them give a positive impression about the application.

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Chapter 1: Introduction

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1.1   Background

Palestine University academic institution of the Palestinian institutions of higher education founded in order to serve the Palestinian people at home and abroad, particularly Arabs and foreigners in general and students. University and holds it upon themselves to provide a great message and a high of modern university education level by creating a learning environment, supported by a modern and integrated electronic techniques and methods and controls and regulations with international standards Academy. [1]

University include several forms of services is the most important university library and include a large number of books, magazines, weekly and monthly periodicals which Association stated on research and increasing students of science, library and borrow books offer the service either for students or faculty company of periods.

Sometimes, students are facing some problems in the case of a metaphor of some rare books and references, a lack of knowledge of the existence of the book or not, for example, if it was borrowed and there is more than one copy, but when and if could he/she goes to the library in person in times of official work.

As for the information technology, especially the modern mobile technologies have we become in the boom of the speed and ease with the possibility of providing services easily through the phone screen anytime, anywhere. It is the most important techniques used in the current period is the Android and relies on the work environment is an easy-to-use than the average user.

It is the most important and the oldest methods used in the libraries. At the order of the books in the library and restore them in case of a request to borrow or add a new book or copies of old books is the Dewey Decimal System, which is a general knowledge with an organization tool that continuously studied to keep pace with knowledge.

 The goal of this project is to allow the use of some of the features of the library through the phones, which operate using the Android environment.

1.2   Problem Statement

The student faces some problems in the process of search and borrow books from the library of the university. Where if it the books are available or not. And if it is borrowed by another student.

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1.3 Objectives

There are main and specific objectives for this project:

1.3.1 Main Objective

1.   Build a mobile application gives the student an easy way to beneficiate from the library services.

2.   Build a mobile application gives the University of Palestine a head step in the new technological ways.

1.3.2 Specific Objective

1.   Enabling the Students to search about the library books by using the Smartphone.

2.   Reserving an available book in the library until the borrower go to the university

3.   Search about books in the library program by Name.

4.   The application send automatically notification to remember the student that borrowing time is finish.

5.   The application Checks with The University database if Student able to borrow new books

1.4 Importance of the project

The university library is one of the very important divisions of it. In addition, it is the aim for the students that is want to do research or search about new information in their studying. In these times most of the university students owns smart phone mobiles. Most of the phones working on Android platform. The university in general and regularly library in response to all of that new technology and Students that are wants new fast simple ways to find the information they are searching about it. Moreover, it is a good factor to the quality of the university.

1.5 Scope and limitations:

1.   The application is always open to use anywhere anytime.

2.   The application considered as a technological service from the university so it is free to install and use by the student or the instructors.

3.   Mobi-Library application, we are using Android™ and it is a computing platform designed for use in some smart phones and other devices. This technology, which owned by Google Inc., includes an operating system, software, and applications.

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1.6   Conclusion

This chapter was transcribed to gives the reader a general idea about the University of Palestine. The library that is a part of the university. The basic information about the Application "Mobi-Library", like the Objectives of it and the scope and limitation.

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Chapter 2: Literature Review

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2.1   The Library

Library provides educational services, where students can research and inquiry in the subjects of study or specialization in the field of general science, poetry, literature, mathematics and history.

2.2   E-Library

The electronic media for the books and journals as a portable document file. It is saved on the web and can be restored any time.

2.3   Mobile Improvement

The technologies have made communication and access to information very convenient and time consuming. The users have the comfort of use in their home and office, and from where ever they are while on the move with their mobile phone units or PDAs. In recent years, the new mobile phones services and facilities have become as important as call making, and even more favorable. As in 2009, which was for the first time ever. [2]

2.4   Android

The Android is a mobile operating system (OS) based on the Linux kernel and currently developed by Google. With a user interface based on direct manipulation, Android designed primarily for touch screen mobile devices such as Smartphone. The OS uses touch inputs that loosely correspond to real-world actions, as swiping, tapping, pinching, and reverse pinching to manipulate on-screen objects, and a virtual keyboard. [3]

Android is the most widely used mobile OS and, as of 2013, the highest selling OS overall. As of July 2013, the Google Play store has had over 1 million Android apps published, and over 50 billion apps downloaded. A developer survey conducted in April–May 2013 found that 71% of mobile developers develop for Android. At Google I/O 2014, the company revealed that there were over 1 billion active monthly Android users, up from 538 million in June 2013.

2.5   Related Works

At the first, until this project is finished there wasn't an official Android Application specialized for library services. In addition, these some symbols of universities that are using library systems by the web to allow students to check about library contents:

2.7.1   In Palestine

2.7.1.1   Al-Quds University – Jerusalem, West Bank

An educational, cultural, and social edifice. The library contains many information resources. Printed, audio-visual and electronic resources. In addition, to the manuscripts, films, discs and posters. Estimated of nearly 100000 cataloged books and computerized on the library software. About 55% Arabic, 45% English, 1820 Arabic dissertations and 650 English dissertations, more than 600 Compact Disks' attached to books, 175 films. Contains various educational and documentary subjects, and 40 computer sets distributed on the library labs for research and educational purposes. [12]

2.7.1.2   Bethlehem Bible College – Bethlehem, West Bank

The Bethlehem Bible College Library is the donation of five hundred new books on theology, biblical studies, Islamic studies, history and other related topics. [13]

2.7.1.3   The Arab American University (AAUJ) – Jenin

University Library will endeavor to provide knowledge and information to beneficiaries of students and members of the faculty and administrative bodies. In addition, in cooperation with the computer center has designed a computerized program for the library working on ORACLE environment serves all works of art from the introduction of the R & Loan and serve all beneficiaries who attend the library. [14]

2.7.2   In the Arab World

2.7.2.1   The Arab International University (AIU) – Syria

An institution of higher education and academic research, Arab International University strives to be a center of excellence that conforms to international standards in education and research. AIU offers Bachelors and Masters Degrees. Its administration and academics modeled on the European Credit Transfer System (ECTS). The language of instruction is English. AIU is developing a distinct identity among its professors and students. [15]

2.7.2.2   The Islamic University (IUL) – Lebanon

The Islamic University of Lebanon is a private Lebanese institution of higher education, licensed in June 12, 1996. The Imam Sayed Moussa Sadr brought this idea forth and laid the groundwork for establishing this institution. The Imam Sheikh Mohammad Mahdi

Shams Eddine made his best endeavors and utmost efforts to build this institution. Today, Imam Sheikh Abdul Amir Qabalan, the chairperson of its Board of Trustees, continues to develop and improve the university. Dr. Hassan Chalabi has been the President of this institution since it founded. [16]

2.7.2.3 Zayed University – United Arab Emirates

This university bears the name of the founder of the UAE, Sheikh Zayed bin Sultan Al-Nahyan. Continue to inspire by the vision of a nation whose progress based on excellence in education, and are therefore committed to making Zayed University a leader in higher education, recognized locally, regionally, and internationally for the quality of our academic programs. [17]

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2.6   Mobi-Library vs. existing systems and applications

The Table 2.1 shows a comparison between our application and the University of Palestine library facilities before the use of the mobile application and after. And it is proves that Mobi-Library provides a lot of benefits both students and university are look for.

Features	Using Library facilities	With Mobi-Library
Ease of search in library References	√	√
Ability to know available from outside UP	x	√
Anyone can use it	√	√
Reserving Book before it is returning	x	√
Comfortable	x	√
Missing information	x	√
Accessibility	x	√
Accuracy for information	√	√

2.7   Conclusion

This chapter shows that is until now there is no programmed application as "Mobi-Library" helps the students of the university in the research of the books. And as the advance technology gives users the ability to make the process of the researching as easy as it is possible.

Table 1: Before and After Using Mobi-Library

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Chapter 3: Methodology

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3.1 Adopted Methodology

The adopted methodology during the development of this project is shown in the next Figure 1. This methodology was implemented under the umbrella of Extreme Programming (XP). It was mainly divided into three main phases planning, implementation, testing and evaluation. During the planning phase several techniques were used in order to define the requirements of the project, these include literature review, brainstorming sessions with team members, interviews with experts and e-survey. After that, the mobile App were developed, evaluated and tested.

Planning

| Literature Review | Brainstorming Sessions | Interviews | e-survey | Requirement Engineering |

Implementation

Develope The Mobile Application

Testing and Evaluation

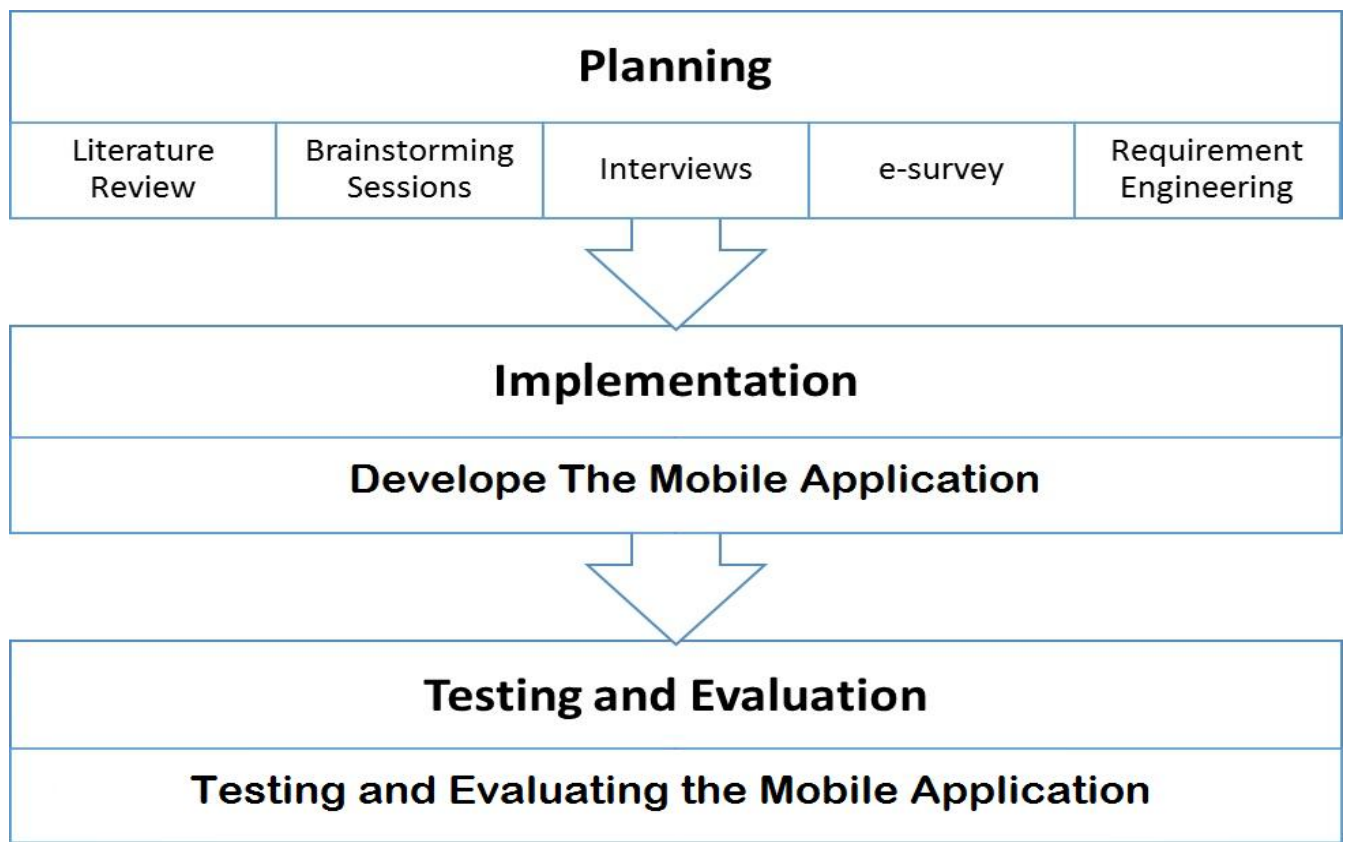**Testing and Evaluating the Mobile Application**

Figure 1 Methodology

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Several activities were performed during the development of the proposed system. During these activities, several tools, techniques and software were used to develop the mobile App. These tools and techniques are shown in Table 2.

Phase	Activity	Sub-activity	Software
Planning	Define User Requirements	Brainstorming sessions with team	SPSS v. 20
		Interviews with experts	
	Analyze User requirements	Develop use-case diagram	Microsoft Visio 2013
		Develop sequence diagram	Microsoft Visio 2013
		Develop activity diagram	Microsoft Visio 2013
Implementation	Develop the mobile Application	Design Interfaces and icons	Adobe Photoshop CS6
		Develop Android mobile App	Android Studio, v.1.5
Testing and Evaluation	Testing the mobile Application	Validate the HTML file	
	Evaluate the mobile Application	Questionnaire	

Table 2: Tools, techniques and software

3.2   Extreme Programming

Extreme Programming (XP) is a system of practices that a community of software developers is evolving to address the problems of quickly delivering quality software and then evolving it to meet changing business needs, (Beck and Fowler, 2000). Beck (2004) considers XP as a lightweight, efficient, low-risk, flexible, predictable, scientific and fun way to develop software. It was developed by Kent Beck in 1996. It works by bringing the whole team together in the presence of simple practices, with enough feedback to enable the team to see where they are and to tune the practices to their unique situation. Beck (2004) states that XP was developed to address the specific needs of software development conducted by small teams in the face of vague and changing requirements. It is distinguished from other methodologies by:

1. Its early, concrete, and continuing feedback from short cycles.
2. Its incremental planning approach, which quickly comes up with an overall plan that is expected to evolve through the life of the project.
3. Its ability to flexibly schedule the implementation of functionality, responding to changing Student needs.
4. Its reliance on automated tests written by programmers and Students to monitor the progress of development, to allow the system to evolve, and to catch defects early.
5. Its reliance on oral communication, tests, and source code to communicate system structure and intent.
6. Its reliance on an evolutionary design process that lasts as long as the system lasts.
7. Its reliance on the close collaboration of programmers with ordinary skills.
8. Its reliance on practices that work with both the short-term instincts of programmers and the long-term interests of the project, (Beck, 2004).

3.2.1 Advantages of Extreme Programming

XP has several advantages, some of these:

1. Customer focus increase the chance that the software product will actually meet the needs of the users
2. The focus on small, incremental release decreases the risk of your project:
   – By showing that your approach works and

    – By putting functionality in the hands of your users, enabling them to provide timely feedback regarding your work.

3. Continuous testing and integration helps to increase the quality of your work

4. XP is attractive to programmers who normally are unwilling to adopt a software process, enabling your organization to manage its software efforts better.

3.2.2 Disadvantages of Extreme Programming

On the other hand, the disadvantages of XP are:

1. XP is code centric rather than design centric development. The lack of XP design concept may not be serious for small programs.
2. XP does not measure or plan Quality aspect of development.
3. XP emphasizes on refactoring during software development process.
4. XP has not been proven to work with systems that have
5. Scalability issues (new applications must integrate into existing systems).

3.2.3 Why Extreme Programming

Extreme Programming (XP) is rapidly becoming recognized as an approach particularly well suited to small teams facing vague or rapidly changing requirements. That is, the majority of projects in today's fast-paced software development world. XP was used due to the fact that:

1. Requirements are changing rapidly.
2. High risk is involved as this is a new challenge projects.
3. Small groups of programmers between (2 and 10).
4. It is able to create automated tests.
5. Direct customer involvement is possible.

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Chapter 4: Analysis, Design and Technology

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4.1 Functional Requirements of Mobi-Library

Functional requirement defines a function of an application its component. A function described as a set of inputs, the process, and outputs. Functional requirements may be technical details, data manipulation and processing and other specific functionality that defines what a system is supposed to accomplish. Behavioral requirements describing all the cases where the system uses the functional.

The target of functional requirement is determine client requests and understanding of the needs of the project that offered, as well as to achieve the desired objective, and discuss who are the target audience for this project, what are the features that will be out of competition by " Mobi-Library ".

4.1.1.1 Student Tasks.

4.1.1.1.1 Order On-line

Student can choose and reserve Book via the mobile application.

4.1.1.1.2 Login via Student information

Student can choose and reserve Book via the mobile application.

4.1.1.2 System Tasks

4.1.2.1.1 Notifications

Show alert to student it him late to bring back book to Library.

4.1.2.1.2 Automatic some processes in the Mobile app

System can do many processes without admin like archiving orders, sent it to servers and librarians account automatically, and do some analytical processes like summary of request (Quantity, Time of retrieve, etc…)

4.1.3 Non-functional requirement

A requirement that specifies criteria that can used to judge the operation of a system.

4.2.1 Usability Requirement

In the basic theoretical process of the application. The developer focus on ease of use it by the user, like adding books and viewing it by simple interface, and in user interface should be view order list and available list. By analysis the testing in the next chapters, the

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developer had some reviews from the information technology college students at the university.

4.2.2   Availability Requirements

The library Data Base saved in an outside server that able the users to login on the application. And that is make it available at all times.

4.2.3   Flexibility Requirements

The mobile application developed to add new processes or remove it, because it is based on object oriented concept.

4.2.3.1   Security Requirements

By adding Security options to the mobile application, the application asking the user for his Student ID number and special password that used in the university web Moodle like the Upinar. The application secure the privacy of users account and there data like saving password, user information and make codes for confirm data and user.

4.3   Use Case Diagram

A use case is a software and system engineering term that describes how a user uses a system to accomplish a particular goal. A use case acts as a software modeling technique that defines the features to implement and the resolution of any errors that may encountered.

The next figure 2 shows how the use case works in the next steps

1   The user log in to the system using ID and Password.

2   System shows the category of the books and the user chooses one.

3   System list the available books and show a brief of info.

4   User specify the book and reserve it.

5   The system response if the book is available or not.

6   User continues the reservation process.

7   Before the reservation time finish, the system gives an alert by notify the user.
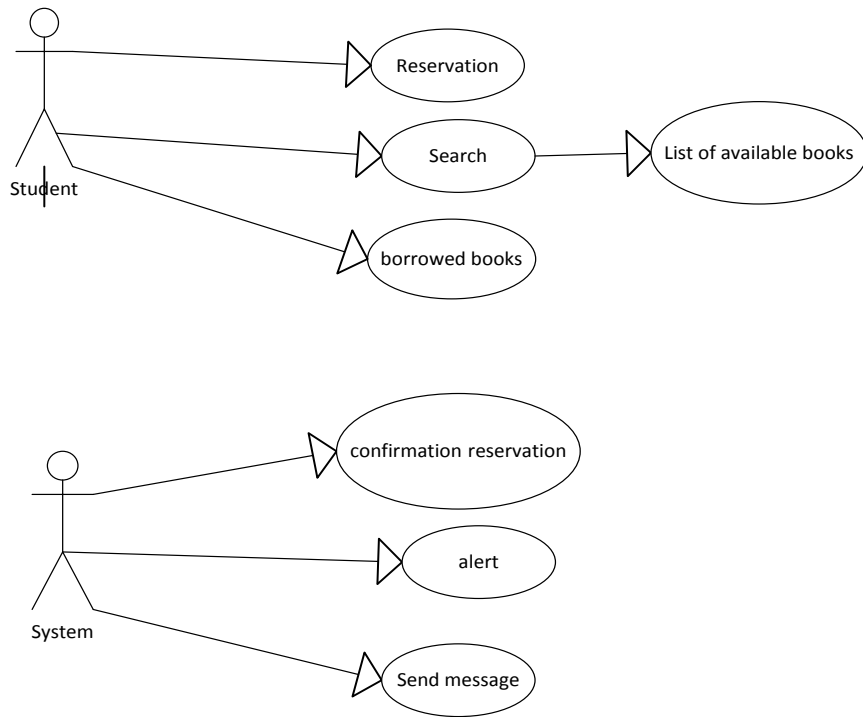
Figure 2 Use Case Diagram

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4.4   Sequence Diagram

In the context of UML, represents object collaboration and is used to define event sequences between objects for a certain outcome sequence diagram is an essential component used in processes related to analysis, design and documentation. In the next figure 3 shows the steps of how the user Searches about a book.

The user login to the System and Enter name of book. The system response by Searching in the Database. The system shows a list of books. The user select from the list and reserve. The system confirms the reserve of book to the user.
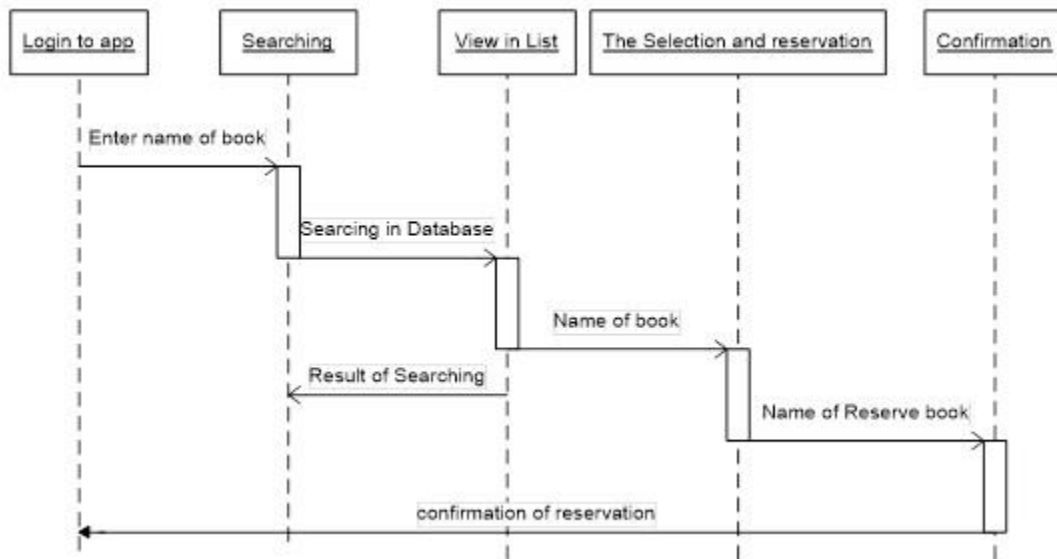
Figure 3: Sequence Diagram

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4.5   Activity Diagram

Another important diagram in UML to describe dynamic aspects of the system. Activity diagram is a flow chart to represent the flow form one activity to another activity. The activity can described as an operation of the system. Therefore, the control flow drawn from one operation to another. This flow can be sequential, branched or concurrent. Activity diagrams deals with all type of flow control by using different elements like fork, join etc. the next figure 4 shows how the process is done.

Figure 4 Activity Diagram

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4.6   System Requirements

At this will describe what Mobi-library need to work better like hardware and software that need for the operation process.
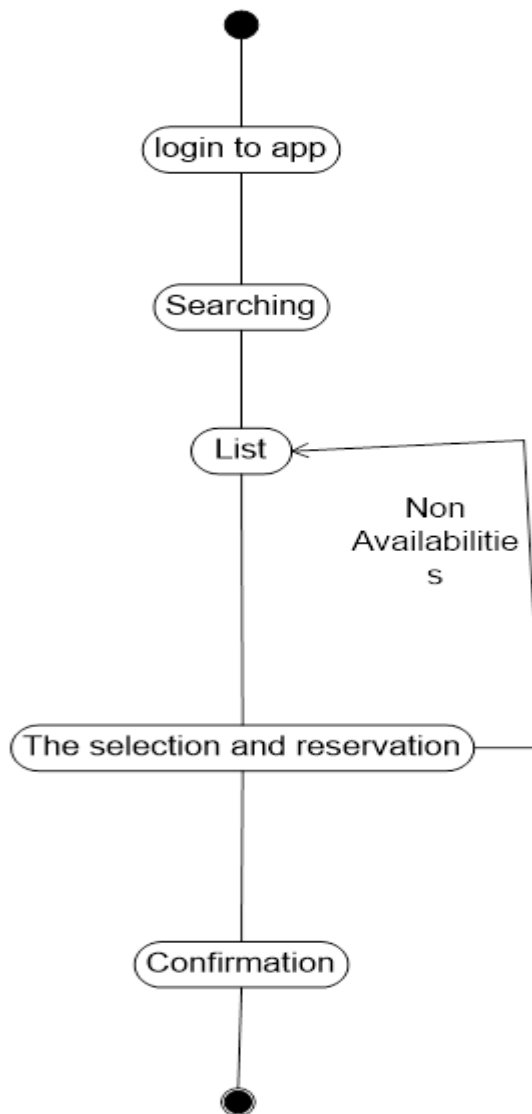
4.6.1 Operation Requirement

Software requirements that need when running and develop Bubbles application in web and mobile.

4.6.2 Running Requirements

❖   Android above 4.2.

4.6.3 Development Requirements

❖   Android studio 5c

4.6.4 Hardware Requirement

Hardware requirements that need when running Bubbles application web and mobile.

❖   Smartphone provide android platform.

❖   Personal Computer that have any operating system.

4.7   Graphical User interface (GUI)

Any application required Graphical user interface and the GUI required better design for the better viewing and at this section would view mobile interface. At the next figures will show you some of the screenshot from the application.

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4.7.1 The Login Screen

In the Figure 5, the mobile application receive the University ID Number and is own password as used that used in the web university Moodle like the Upinar and Registration Page.
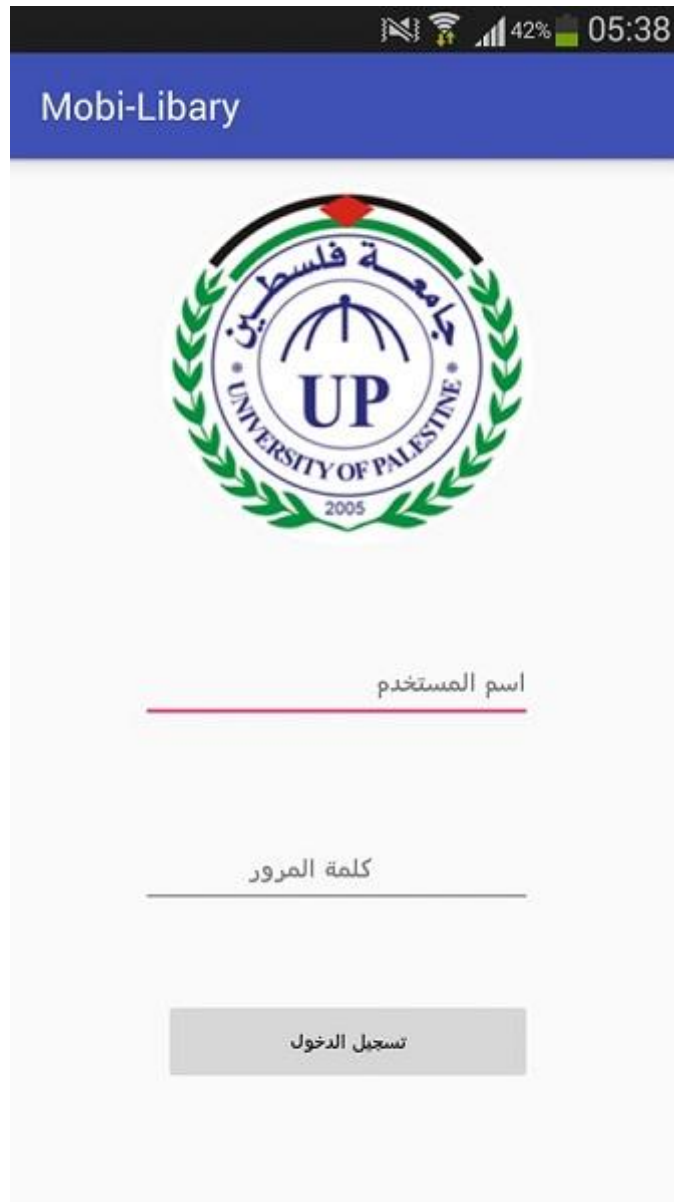
Figure 5: The Login Screen

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4.7.2 The Default (Start Page) Screen

In the Figure 6, the application will show the user the basic direction, which is supposed to choose by the user. If the user want to search about the books he/she will choose the books categories. And the user can go to the Upinar through the application by clicking The Upinar Line. When finish the user will click on Log-out Line.

Figure 6: The Default screen

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4.7.3 The Category Screen

In the Figure 7, the application will show you the main category of the books that available at the Library Shelves.

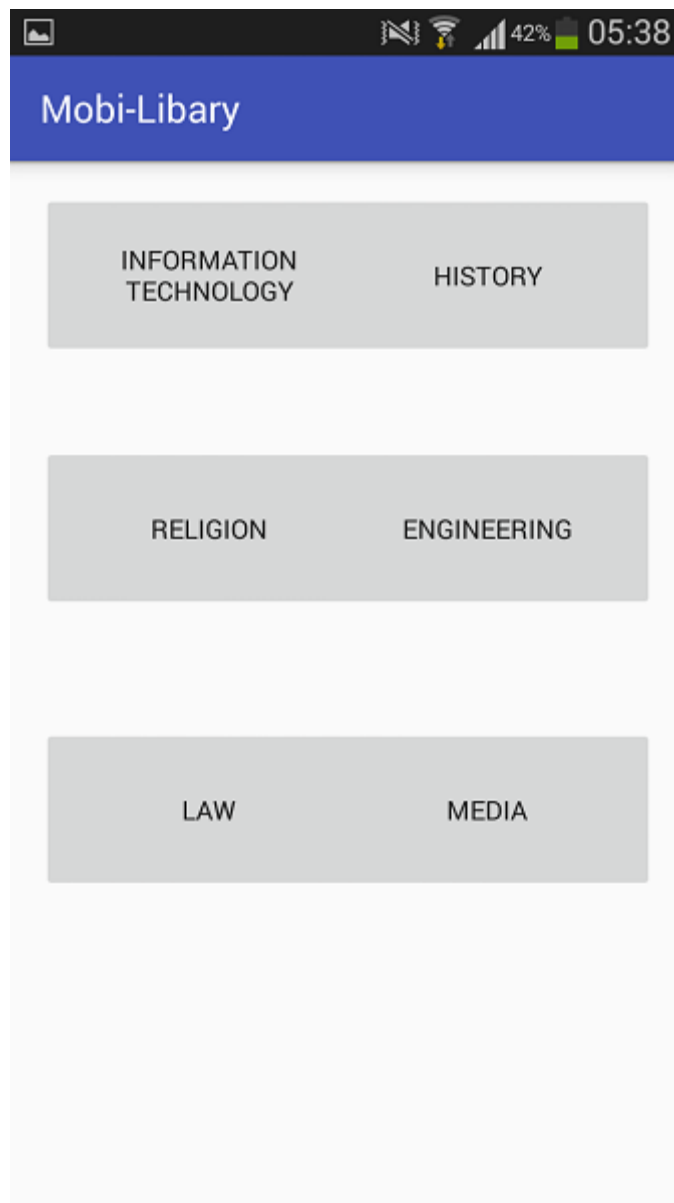**Figure 7: The categories screen**

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4.7.4 The List of books Screen

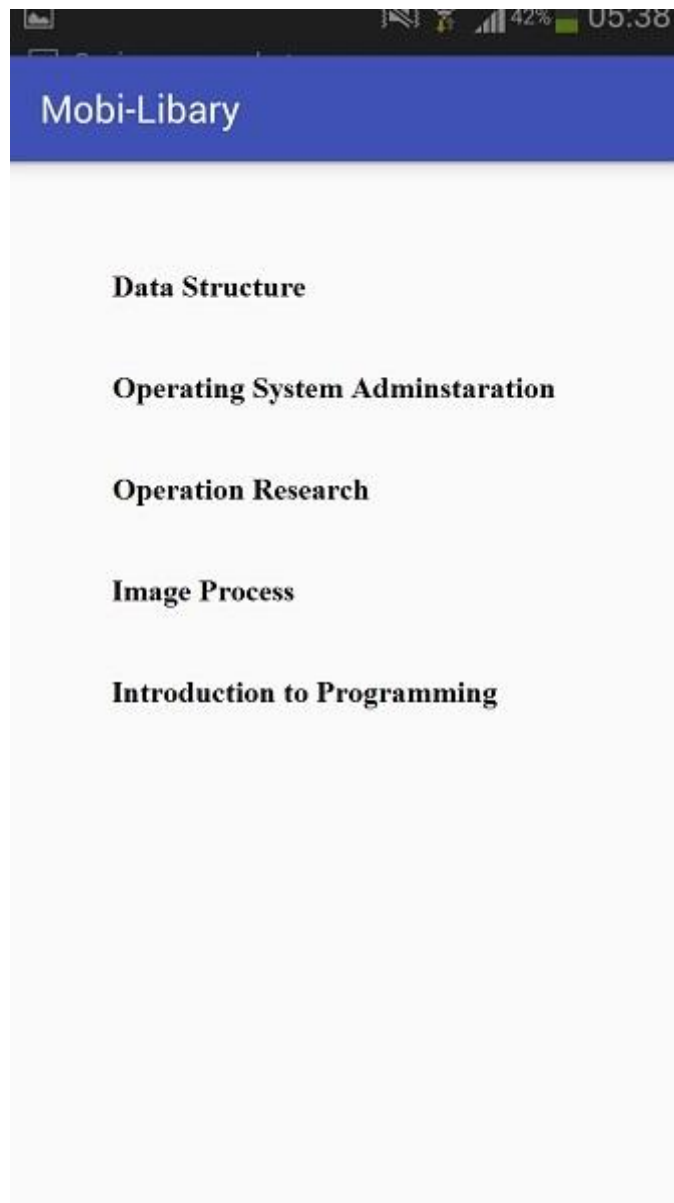In the figure 8, the application shows the user the books that available at the library in the selected category.

Figure 8: List of book screen

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CHAPTER 5:

Implementation and

Evaluation

5.1   Implementation

The implementation process is by making the requirements and procedures that have been working on the application where the application implemented on the technology, which supported by (Android) after skipping the stage of testing and examination of mistakes. Moreover, see the process of display products that added through the site.

5.2   Testing

Software testing is more than just the discovery of the error. Software testing program operates under the control of you to discover the mechanism of action you are correct. The discovery of the errors, if any, how to deal with these mistakes and reform it in order to get the best user-expected results.

1.   Verification and examination, test elements of the application, including software, and matching the results with input application, check to get the best results.

2.   Detect errors must be expected to hold all the processes and non-projected on the application in order to detect errors that could arise and avoid their occurrence in the future.

3.   approval of the application as it has been handling all the mistakes which have been falling out and make sure it has been crossed, and the application is expected to work with the user and obtaining the best results (Does the system resulted in the desired correctly)

5.2.1   Purpose of Testing

The purpose of the test will conducted to test the two phases.

1.   The first phase: (system test)

Is the desired system specifications by the provider of the competition, and verify the application of the mechanism of action and performance is it possible to make any adjustments or updates to the application to add other features.

2.   The second phase (the user)

Is the application provides the desired results to the user, you process the application performance good from the point of view of the user, you mechanism.

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5.2.2 The importance of testing

The importance of the test on two Steps

1. The first level

When the application programmed to get the desired results and the performance of the application work of him.

2. The second level

The user that he will work with the application does not have a distinctive mistake and more importantly the piece that he can provide the application results and information that meet the wants and Needs.

5.2.3 Test Challenges

This project found some challenges like Mobile screen size and network connection, but in the application, the developer solve some of these challenges.

Chapter 6: Future Work and the Conclusion

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6.1 Introduction

This chapter summarizes the discussion about the project and shows the future work. At the end, it gives a conclusion for the project with Results has been reached and provides some important recommendations for the system developer in the future. The new system has been deployed with so much care that it is develop with the minimum number of errors and at the same time efficient and less time consuming.

6.2 Conclusion

There are a number of factors that need to be considered in this application. In the first, the application designed and developed by the university students so there is a possible of lack in the design. The application are using the library archives and that is possible to be not updated every day.

6.3 Project Challenges

The application is designed to be used in the university library archives and as a start by the student or university lecturers and the stuff of the University of Palestine only.

6.4 Future Works

In the future plans of the developers of this project there are some ideas not applied yet in the application. Like adding extra search options such as: Topic, Author, Specialty, and Publish Date. The English version of the application, if anyone needs to use it, as if foreign user or mobile phone not supporting the Arabic version. The outside service, to able the users will be to search for books that available in other universities libraries that located in Gaza Strip like Al-Azhar or Al-Aqsa. And the books archive will be stored in the mobile phone with no connection.

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Appendices:

Appendices A:

The complete Java code that used in the application

```
import android.app.Activity;

import android.content.Intent;

import android.graphics.Typeface;

import android.support.v7.app.AppCompatActivity;

import android.os.Bundle;

import android.util.Log;

import android.view.Menu;

import android.view.MenuItem;

import android.app.ProgressDialog;

import android.view.View;

import android.widget.Button;

import android.widget.EditText;

import android.widget.Toast;

import com.android.volley.Request;

import com.android.volley.Response;

import com.android.volley.VolleyError;

import com.android.volley.toolbox.StringRequest;

import com.example.bahaa.smart_os.helper.SQLiteHandler;
```

`

```java
import com.example.bahaa.smart_os.helper.SessionManager;

import com.example.bahaa.smart_os.AppController;

import com.example.bahaa.smart_os.AppConfig;

import com.example.bahaa.smart_os.R;

import org.json.JSONException;

import org.json.JSONObject;

import java.net.HttpURLConnection;

import java.util.HashMap;

import java.util.Map;

public class Login extends Activity {

    private static final String TAG = Signup.class.getSimpleName();

    private Button log;

    private Button Signup;

    private EditText mobile_number;

    private EditText Password;

    private ProgressDialog pDialog;

    private SessionManager session;

    private SQLiteHandler db;

    @Override

    protected void onCreate(Bundle savedInstanceState) {

        super.onCreate(savedInstanceState);

        setContentView(R.layout.activity_login);

        mobile_number = (EditText) findViewById(R.id.log_mob);
```

`

```java
Password = (EditText) findViewById(R.id.log_pass);

log = (Button) findViewById(R.id.Login);

Signup = (Button) findViewById(R.id.button2);

// Progress dialog

pDialog = new ProgressDialog(this);

pDialog.setCancelable(false);

// SQLite database handler

db = new SQLiteHandler(getApplicationContext());

// Session manager

session = new SessionManager(getApplicationContext());

// Check if user is already logged in or not

if (session.isLoggedIn()) {

    // User is already logged in. Take him to main activity

    Intent intent = new Intent(Login.this, MainActivity.class);

    startActivity(intent);

    finish();

}


log.setOnClickListener(new View.OnClickListener() {

    @Override

    public void onClick(View v) {

        String mobile = mobile_number.getText().toString().trim();

        String password = Password.getText().toString().trim();
```

`

```java
        // Check for empty data in the form

        if (!mobile.isEmpty() && !password.isEmpty()) {

            // login user

            checkLogin(mobile, password);

        } else {

            // Prompt user to enter credentials

            Toast.makeText(getApplicationContext(),

                    "Please enter the credentials!", Toast.LENGTH_LONG)

                    .show();

        }

    }

    private void checkLogin(final String mobile, final String password) {

        // Tag used to cancel the request

        String tag_string_req = "req_login";

        pDialog.setMessage("Logging in ...");

        showDialog();

        StringRequest strReq = new StringRequest(Request.Method.POST,

                AppConfig.URL_LOGIN, new Response.Listener<String>() {

            @Override

            public void onResponse(String response) {

                Log.d(TAG, "Login Response: " + response.toString());

                hideDialog();
```

```
`

try {

    JSONObject jObj = new JSONObject(response);

    boolean error = jObj.getBoolean("error");

    // Check for error node in json

    if (!error) {

        // user successfully logged in

        // Create login session

        session.setLogin(true);

        // Now store the user in SQLite

        String mobile_no = jObj.getString("uid");

        JSONObject user = jObj.getJSONObject("user");

        String mobile = user.getString("name");

        String pass = user.getString("password");

        // Inserting row in users table

        db.addUser(mobile, pass, mobile_no);

        // Launch main activity

        Intent intent = new Intent(Login.this,

            MainActivity.class);

        startActivity(intent);

        finish();

    } else {

        // Error in login. Get the error message

        String errorMsg = jObj.getString("error_msg");
```

```
`

            Toast.makeText(getApplicationContext(),

                errorMsg, Toast.LENGTH_LONG).show();

          }

        } catch (JSONException e) {

          // JSON error

          e.printStackTrace();

          Toast.makeText(getApplicationContext(), "Json error: " + e.getMessage(),
Toast.LENGTH_LONG).show();

          }

        }

      }, new Response.ErrorListener() {

        @Override

        public void onErrorResponse(VolleyError error) {

          Log.e(TAG, "Login Error: " + error.getMessage());

          Toast.makeText(getApplicationContext(),

              error.getMessage(), Toast.LENGTH_LONG).show();

          hideDialog();

        }

      }) {

        @Override

        protected Map<String, String> getParams() {

          // Posting parameters to login url

          Map<String, String> params = new HashMap<String, String>();
```

```java
`

            params.put("Mobile", mobile);

            params.put("password", password);

            return params;

        }

    };

    // Adding request to request queue

    AppController.getInstance().addToRequestQueue(strReq, tag_string_req);

    }

});


    Signup.setOnClickListener(new View.OnClickListener() {

        @Override

        public void onClick(View v) {

            Intent i = new Intent(Login.this,Signup.class);

            startActivity(i);

            finish();

        }

    });

}

private void showDialog() {

    if (!pDialog.isShowing())

        pDialog.show();

}
```

```
`

    private void hideDialog() {

        if (pDialog.isShowing())

            pDialog.dismiss();

    }

}
```

`

Appendices 2:

<u>استبانة تقيم لبرنامج Mobi-Library</u>

عزيزي الطالب/ عزيزي الموظف

السلام عليكم ورحمة الله وبركاته

تهدف هذه الاستبانة الى معرفة وجهة نظرك وانطباعك عن استخدام برنامج Mobi-Library وهو برنامج يهدف الى تسهيل طرق استعارة الكتب من مكتبة الجامعة من خلال استخدام والتطبيق

نرجو منكم التفضل بالإجابة عن اسئلة الاستبانة التالية، علما ان اجاباتكم ستستخدم لغرض البحث العلمي فقط وستكون مساهمتكم في محل الاحترام والتقدير.

وتفضلوا بقبول فائق التقدير والاحترام

الطلاب:
طارق البسيوني
فراس أبو معيلق

خالد الحنفي
كلية تكنولوجيا المعلومات
جامعة فلسطين
مدينة الزهراء

تنقسم هذه الاستبانة الى قسمين:

القسم الاول يهتم بمعلومات خاصة بك:

1 ـ ماهي وظيفتك الحالية: _____

2 ـ الجنس ☐ ذكر ☐ انثى.

3 ـ سنوات الخبرة في استخدام الموبايل:

☐ لا يوجد ☐ اقل من 5 سنوات ☐ 5-9 سنوات ☐10 سنوات

هل تذهب الى المكتبة لاستعارة الكتب

☐ نعم ☐ لا

إذا كان جوابك نعم انتقل الى القسم الثاني من الأسئلة

القسم الثاني حول استخدام البرنامج Mobi-Library:

بعد قراءتك للخيارات ضع دائرة حول الرقم الموافق لرأيك:

- ❖ دائرة حول 5 يعني موافق بشدة
- ❖ دائرة حول 4 يعني موافق
- ❖ دائرة حول 3 يعني محايد
- ❖ دائرة حول 2 يعني غير موافق
- ❖ دائرة حول 1 يعني غير موافق بشدة

					تهدف هذه المجموعة لمعرفة وجهة نظرك تجاه لفائدة من استخدام برنامج Mobi-Library	
5	4	3	2	1	**هل تواجه صعوبة في البحث عن الكتب**	**1-**
5	4	3	2	1	**ما رأيك في استخدام برنامج يساعدك في البحث عن الكتب**	**2-**
5	4	3	2	1	**هل تعاملت مع برنامج يشبه هذا البرنامج من قبل**	**3-**
5	4	3	2	1	**هل البرنامج سهل الاستخدام**	**4-**
5	4	3	2	1	**هل التفاعل مع البرنامج واضح**	**5-**
5	4	3	2	1	**هل الخدمة التي يقدمها برنامجنا كافية**	**6-**
5	4	3	2	1	**هل يعمل البرنامج بشكل جيد**	**7-**
5	4	3	2	1	**هل استفدت من برنامج**	**8-**

5	4	3	2	1		**هل توصي اصدقائك باستخدام البرنامج**	**9ـ**