

CHAPTER 1

1.1 PROJECT OVERVIEW

The course completion and certificate generation system is an offline course and test system that allows users to take offline tests and automatically generates results based on answers marked by users. The system can be used by schools colleges and other institutions. The system is an android application that can be used to take tests offline and to learn courses. The system is designed currently for few courses. This project is developed by the front end Java and backend SQLITE.

This application is developed for candidates who are interested in learning courses via downloading this app. This application is user friendly and can be accessed by everyone by logging in their id.

1.2 PROJECT MODULES

- Login
- Registration
- Notes
- Test
- Certificate generation

1.3 MODULE DESCRIPTION

1.3.1 Login Module

In this application, the first step is login mode. User can login here by entering the student name and password. User should enter the correct username and password. If they enter wrong they are not allowed to login.

1.3.2 Registration Module

The candidate can create their own login id for this application by secured password. Users are supposed to register in-order to login. Users are not allowed to login if they don't register.

1.3.3 Notes

All the notes of selected course are displayed here.

1.3.4 Test

User can take tests after the completion of course. In Test all the questions are of MCQ type.

1.3.5 Certificate Generation

After Completion of course, user can take test. User can view their Test performance in that Certificate. Certificate is generated after the completion of test.

CHAPTER 2

SYSTEM ANALYSIS

2.1 INTRODUCTION

On this stage, the developers analyse the information gathered during the planning phase, study the flow of the current system and then started creating charts, diagrams and uses other tools to create a good flow of the proposed system. The researchers analyse the process on how it works and even the simplest problems that must give prioritize. And through these the researchers identify what are tools, software that they may use to proposed system. Who will be benefited in this project and how it will be implemented while limiting the cost of the project.

2.2 EXISTING SYSTEM

In existing system, students studied courses through books and they take tests through pen and paper. This type of system is not suitable to the current generation. It involves waste of time.

All the concepts will be not available in a single book. Students need to refer many books to learn a course. To overcome all these problems, a new application is developed where can find the all the courses here and they can take assessments also.

2.3 PROPOSED SYSTEM

The proposed system is developed for the users to learn a course perfectly along with tests. After the completion of all the courses and tests a certificate will be generated.

The learning involves the simultaneous participation of teachers and a large number of students and is similar to a classroom and on a much larger scale. This methodology is well suited to the current generation of mobile-Twitter-Facebook-YouTube savvy students. The enrolment and learning from these courses involve no cost.

Advantages of proposed system

- Learning at an individual pace
- Many ways to use
- Easy to deliver
- More effective learning

- Opportunity for self-study
- Chance for self-testing
- The system calculates the score and provides results.
- It removes human errors that commonly occur during manual checking.
- The system provides an unbiased result.
- Thus the system excludes human efforts and saves time and resources

2.4 FEASIBILITY STUDY

A feasibility study is an analysis of how successfully a project can be completed, accounting for factors that affect it such as economic, technological, legal and scheduling factors. Project managers use feasibility studies to determine potential positive and negative outcomes of a project before investing a considerable amount of time and money into it.

A feasibility study aims to objectively and rationally uncover the strengths and weaknesses of an existing business or proposed venture, opportunities and threats present in the natural environment, the resources required to carry through, and ultimately the prospects for success. In its simplest terms, the two criteria to judge feasibility are cost required and value to be attained.

A well-designed feasibility study should provide a historical background of the business or project, a description of the product or service, accounting statements, details of the operations and management, marketing research and policies, financial data, legal requirements and tax obligations. Generally, feasibility studies precede technical development and project implementation.

A feasibility study evaluates the project's potential for success; therefore, perceived objectivity is an important factor in the credibility of the study for potential investors and lending institutions. It must therefore be conducted with an objective, unbiased approach to provide information upon which decisions can be based.

2.4.1 TECHNICAL FEASIBILITY

Technical feasibility assesses the current resources (such as hardware and software) and technology, which are required to accomplish user requirements in the software within the allocated time and budget. For this, the software development team ascertains whether the

current resources and technology can be upgraded or added in the software to accomplish specified user requirements. Technical feasibility also performs the following tasks.

- Analyses the technical skills and capabilities of the software development team members
- Determines whether the relevant technology is stable and established
- Ascertains that the technology chosen for software development has a large number of users so that they can be consulted when problems arise or improvements are required.

2.4.2 OPERATIONAL FEASIBILITY

Operational feasibility assesses the extent to which the required software performs a series of steps to solve business problems and user requirements. This feasibility is dependent on human resources (software development team) and involves visualizing whether the software will operate after it is developed and be operative once it is installed. Operational feasibility also performs the following tasks.

- Determines whether the problems anticipated in user requirements are of high priority
- Determines whether the solution suggested by the software development team is acceptable
- Analyses whether users will adapt to a new software
- Determines whether the organization is satisfied by the alternative solutions proposed by the software development team.

2.4.3 ECONOMIC FEASIBILITY

Economic feasibility determines whether the required software is capable of generating financial gains for an organization. It involves the cost incurred on the software development team, estimated cost of hardware and software, cost of performing feasibility study, and so on. For this, it is essential to consider expenses made on purchases (such as hardware purchase) and activities required to carry out software development. In addition, it is necessary to consider the benefits that can be achieved by developing the software. Software is said to be economically feasible if it focuses on the issues listed below.

- Cost incurred on software development to produce long-term gains for an organization
- Cost required to conduct full software investigation (such as requirements elicitation and requirements analysis)

Cost of hardware, software, development team, and training

CHAPTER 3

SYSTEM SPECIFICATION

System specification is key information for programming. Testing & implementing the project. The specification should delineate the user requirements, They must reflect the actual application to be handled by the system & include system Objectives, Flowcharts, Input/ Output requirements, file structure & cost. The specification must also describe each aspect of the system clearly, consistently completely.

3.1 HARDWARE SPECIFICATION

- Processor : IntelPentium
- RAM : 2GB
- Hard Disk : 250 GB
- Monitor : DELL
- Keyboard : 104 Keys(Logitech)

3.2 SOFTWARE SPECIFICATION

- Operating System : Windows XP
- Front-end : Html,Bootsnap,css
- Back-end : Mysql
- IDE : PhP

3.3 PHP overview

PHP is an open source and Linux-based **Operating System** for mobile devices such as smartphones and tablet computers. PHP was developed by the Open Handset Alliance, led by Google, and other companies.

PHP offers a unified approach to application development for mobile devices which means developers need only develop for PHP, and their applications should be able to run on different devices powered by PHP.

The first beta version of the PHP Software Development Kit (SDK) was released by Google in 2007 where as the first commercial version, PHP 1.0, was released in September 2008.

On June 27, 2012, at the Google I/O conference, Google announced the next PHP version, 4.1 Jelly Bean. Jelly Bean is an incremental update, with the primary aim of improving the user interface, both in terms of functionality and performance.

The source code for PHP is available under free and open source software licenses. Google publishes most of the code under the Apache License version 2.0 and the rest, Linux kernel changes, under the GNU General Public License version 2.

3.4 PHP overview

PHP programming language was originally developed by Sun Microsystems which was initiated by James Gosling and released in 1995 as core component of Sun Microsystems' PHP platform (PHP 1.0 [J2SE]).

The latest release of the PHP Standard Edition is PHP SE 8. With the advancement of PHP and its widespread popularity, multiple configurations were built to suit various types of platforms. For example: J2EE for Enterprise Applications, J2ME for Mobile Applications. The new J2 versions were renamed as PHP SE, PHP EE, and PHP ME respectively. PHP is guaranteed to be Write Once, Run Anywhere.

3.5 Mysqli overview

Mysqli can power your app's backend, including data storage, user authentication, static hosting, and more. Focus on creating extraordinary user experiences. We will take care of the rest. Build cross-platform native mobile and web apps with our PHP, iOS, and PHPScript SDKs. You can also connect Mysqli to your existing backend using our server-side libraries or our REST API.

CHAPTER 4

SYSTEM DESIGN

4.1 INTRODUCTION

System design is the creation of road map that shows system developers how to convert system requirements into a workable and operational system by exploring system and identifying the best design for the project.

Systems design is the process of defining the architecture, modules, interfaces, and data for a system to satisfy specified requirements. Systems design could be seen as the application of systems theory to product development. There is some overlap with the disciplines of systems analysis, systems architecture and systems engineering.

4.2 LOGICAL DESIGN

Logical design identifies the record and relationship to be handled by the system. It focuses on the logic, or the reasoning, behind the system by breaking down the system into subsystem until the process cannot be repeated any further.

Logical design that make a user to register their details are designed with the logic given by the requirement and the database is designed to retrieve of data from the database for a course completion certificate.

Logical design of a system pertains to an abstract representation of data flows, inputs and output of the system. This is often conducted via modeling, using an over-abstract (and sometimes graphical) model of the actual system.

4.3 PHYSICAL DESIGN

The physical design is a transformation structural component into a procedural description of the projects. It also describes the creatures of the system, the components or elements of the system and their appearance to the customer.

The physical design is designed as an attractive way and the efficient way, because the users have to easily register for their course completion with valid details and complete all courses.

4.4 INPUT DESIGN

The collection of input data is considered to be most expensive part of the system design.

The main objective of input design is to produce output in neat format and get high level accuracy. In this project username is get from the user in register page by using textbox, after that user can give information about them in corresponding form fields.

4.5 OUTPUT DESIGN

Output design generally refers to the results and information that are generated by the system for many end-users; output is the main reason for developing the system and the basis on which they evaluate the usefulness of the application.

In the project, the Text edit is displayed. The reports here generated vividly and the text edit can be seen through the reports.

The output design is going an activity almost from the beginning of the project, and follows the principles of form design. Effective and well define an output design improves the relationship of system and the user, thus facilitating decision-making. A major form of output is a hard copy from the printer, however soft copies are available.

4.6 DATABASE DESIGN

A database design is a must for any application developed especially for storing the data's correspond to the project. Here the total user details are stored in database, and all the data's are stored securely.

A database design contains the repository of an organization's electronically stored data. Database are designed to facilitate reporting and analysis.

A database design contains the repository of an organization's electronically stored data. Database are designed to facilitate reporting and analysis. A fully attributed data model contains detailed attributes for each entity.

The term database design can be used to describe many different parts of the design of an overall database system. The term database design could also be used to apply all the

overall process of designing, not just the base data structures, but also the forms and queries used to be the part of the overall database application within the database management system.

USER REGISTRATION TABLE

Primary key:id

Purpose: User Information

FIELD NAME	DATA TYPE	LENGTH	CONSTRAINTS
User Id	Int	10	PRIMARY_KEY
User Name	String	20	NOT_NULL
Email	String	50	NOT_NULL
Password	String	10	NOT_NULL
Confirm Password	String	10	NOT_NULL
Phone Number	Double	10	NOT_NULL

Table 4.6.1 User registration Table

TEST TABLE

Primary key:Testid

Purpose: Test Information

FIELD NAME	DATA TYPE	LENGTH	CONSTRAINTS
Test Id	Int	10	PRIMARY_KEY
Questions	String	100	NOT_NULL
Options	String	50	NOT_NULL
Correct Options	String	10	NOT_NULL

Table 4.6.2Test Table

4.7 DATAFLOW DIAGRAM

Data flow diagram is used to define the flow of the system and its resources such as information. Data flow diagrams are a way of expressing project requirements in a graphical manner. Data flow diagram represents one of the most ingenious tools used for structured analysis.

A Data Flow Diagram or DFD, as it shortly called is known as bubble chart. It has the purpose of clarifying system requirements and identifying major transformations that will become programs in the system design...

With a data flow diagram, users are able to visualize how the system will operate, what the system will accomplish, and how the system will be implemented. Dataflow diagrams can be used to provide the end user with a physical idea of where the data they input ultimately has an effect upon the structure of the whole system from order to dispatch to report. How any represents one of the most ingenious tools used for structured analysis.

The sponsor of a project and the end user will need be briefed and consulted throughout all stages of a system's evolution. With a data flow diagram, users are able to visualize how the system will operate, what the system will accomplish, and how the system will be implemented.

A DFD consists of a series of bubbles joined by lines. The bubbles represent data transformation and lines represent flow in the system. In the normal convention, a DFD has four major symbols. Square this defines source or symbols.

- Arrows which shows data flow.
- Circles which represents a process that transforms incoming data into outgoing flow.
- Open rectangle that shows data store

Process

Process is applied to something that goes on or takes place. A process is a series of progressive and interdependent steps by which an end is attained. A transfer of information that is resides within the bounds of the System to be modeled. It is a systematic series of actions directed to some end.

Dataflow

Dataflow is a software architecture based on the idea that changing the value of a variable should automatically force recalculation of the values of variables which depend on its value. Dataflow embodies these principles, with spreadsheets perhaps the most widespread embodiment of dataflow. A data item or collection of data items a repository of data. That is to be stored for use by one or more.

Entity

Entity classes model the information handled by the system, and sometimes the behavior associated with the information. They should not be identified as database tables or other datastores. A procedure or consumer of information is that reside the bound of the system to be modeled.

Data Store

A *data store* is a data repository of a set of integrated objects. These objects are modeled using classes *defined* in database schemas. Processes may be as simple as a buffer or queue or as sophisticated as a relational database.

Update Flow

A two-dimensional diagram is that explains how data is processed and transferred in a system. Update flows are used to indicate an update of a data store that is, a read, change, and store operation on a data flow.

4.7.1 DATAFLOW DIAGRAM

Level 0 Data Flow Diagram for User

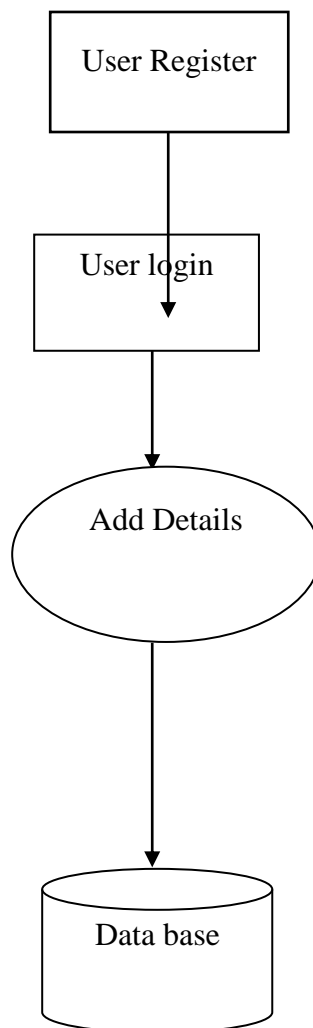


Figure No 4.7.1 Level 0 DFD for User

Level 1 DFD User detail

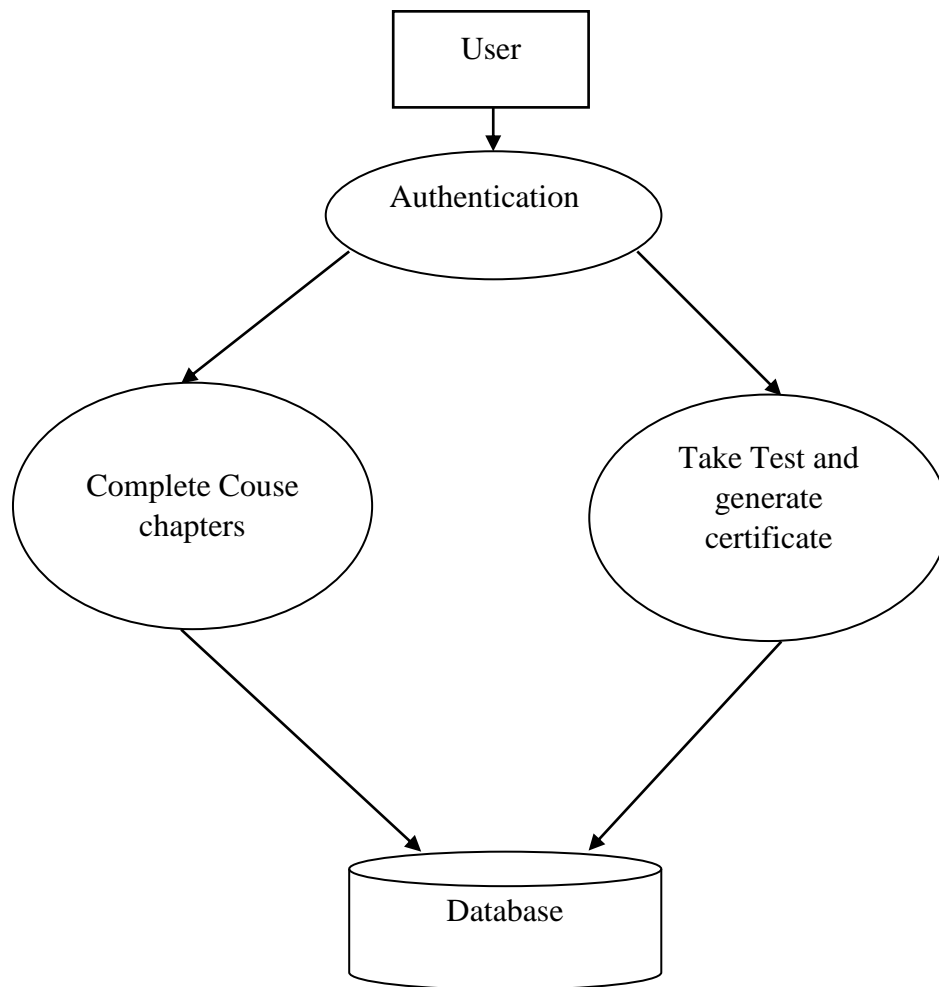


Figure No 4.7.2 DFD foruser

CHAPTER 5

SYSTEM TESTING

5.1 INTRODUCTION

System Testing is a black box testing technique performed to evaluate the complete system the system's compliance against specified requirements. In System testing, the functionalities of the mobile application are tested from an end-to-end perspective.

The purpose of testing is to discover errors. Testing is the process of trying to discover every conceivable fault in a mobile application. It provides a way to check the functionality of components, sub-assemblies, assemblies and a complete application testing.

Software system meets its requirements and user expectations and does not fail in an unacceptable manner. There are various types of testing. Each test type addresses a specific testing requirement.

5.2 UNIT TESTING

Unit testing involves the design of test cases that validate that the student internal mark process logic is functioning properly, and that program inputs produce valid outputs. All decision branches and internal code flow should be validated. It is the testing of individual software units of the application is done after the completion of an individual unit before integration.

Unit testing is commonly automated, but may still be performed manually. The objective in unit testing is to isolate a unit and validate its correctness. A manual approach to unit testing may employ a step-by-step instructional document. Conversely, if not planned carefully, a careless manual unit test case may execute as an integration test case that involves many software components, and thus preclude the achievement of most if not all of the goals established for unit testing.

Unit tests perform basic tests at component level and test a specific application, and system configuration. Unit tests ensure that each unique path of a student internal mark

process performs accurately to the documented specifications and contains clearly defined inputs and expected results.

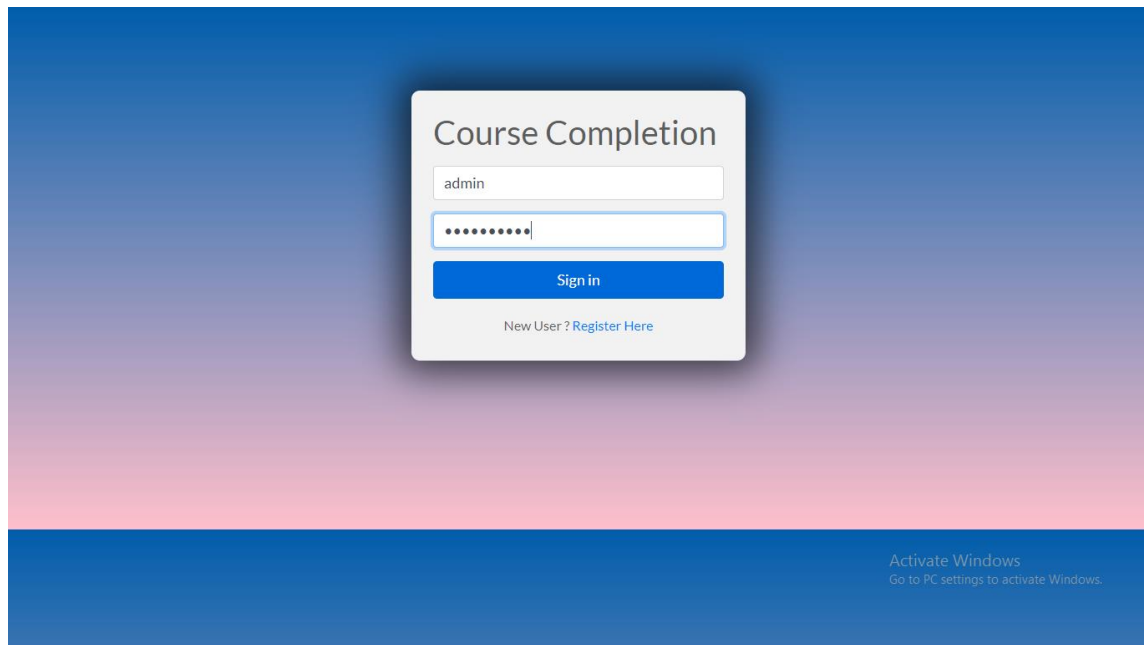


Figure 5.2 Unit Testing For Admin Login

5.3 INTEGRATION TESTING

Integration tests are designed to test integrated student details and feedback about the staffs to determine if they actually valid for login into the application. Testing is event driven and is more concerned with the basic outcome of marks in screens or fields. Integration tests demonstrate that although the components were individually satisfaction, as shown by successfully unit testing, the combination of components is correct and consistent.

The purpose of integration testing is to detect any inconsistencies between the software units of students and staffs data's that are integrated together (called assemblages) or between any of the assemblages and the hardware that used for the mobile application. System testing is a more limited type of testing; it seeks to detect defects both within the "inter-assemblages" and also within the system as a whole.

Some different types of integration testing are top-down, and bottom-up testing.

Bottom-up testing is an approach to integrated testing where the lowest level components are tested first, then used to facilitate the testing of higher level components. The process is repeated until the component at the top of the hierarchy is tested.

Top-down testing is an approach to integrated testing where the top integrated modules are tested and the branch of the module is tested step by step until the end of the related module.

Login Here'. In the bottom right corner of the background, there is a faint 'Activate Windows' watermark." data-bbox="138 234 855 520"/>

Figure 5.3 Integration Testing

5.4 FUNCTIONAL TESTING

Functional tests provide systematic demonstrations that functions tested are available as specified by the technical requirements, system documentation, and students manuals.

Organization and preparation of functional tests is focused on requirements, key functions, or special test cases. In addition, systematic coverage pertaining to identify mobile application for internal marks process flows; data fields, predefined processes, and successive processes must be considered for testing. Before functional testing is complete, additional tests are identified and the effective value of current tests is determined.

5.5 SYSTEM TESTING

System testing is performed on the entire system in the context of a Functional Requirement Specification(s) and/or a System Requirement Specification. System testing tests not only the design, but also the behavior and even the believed expectations of the customer. It is also intended to test up to and beyond the bounds defined in the software/hardware requirements specification(s).

System testing of software or hardware is testing conducted on a complete, integrated system to evaluate the system's compliance with its specified requirements. System testing falls within the scope of black-box testing, and as such, should require no knowledge of the inner design of the code.

TEST STRATEGY AND APPROACH

Field testing will be performed manually and functional tests will be written in detail.

TEST OBJECTIVES

- All field entries must work properly.
- Pages must be activated from the identified link.
- The entry screen, messages and responses must not be delayed.

FEATURES TO BE TESTED

- Verify that the entries are of the correct format
- No duplicate entries should be allowed
- All links should take the user to the correct page.

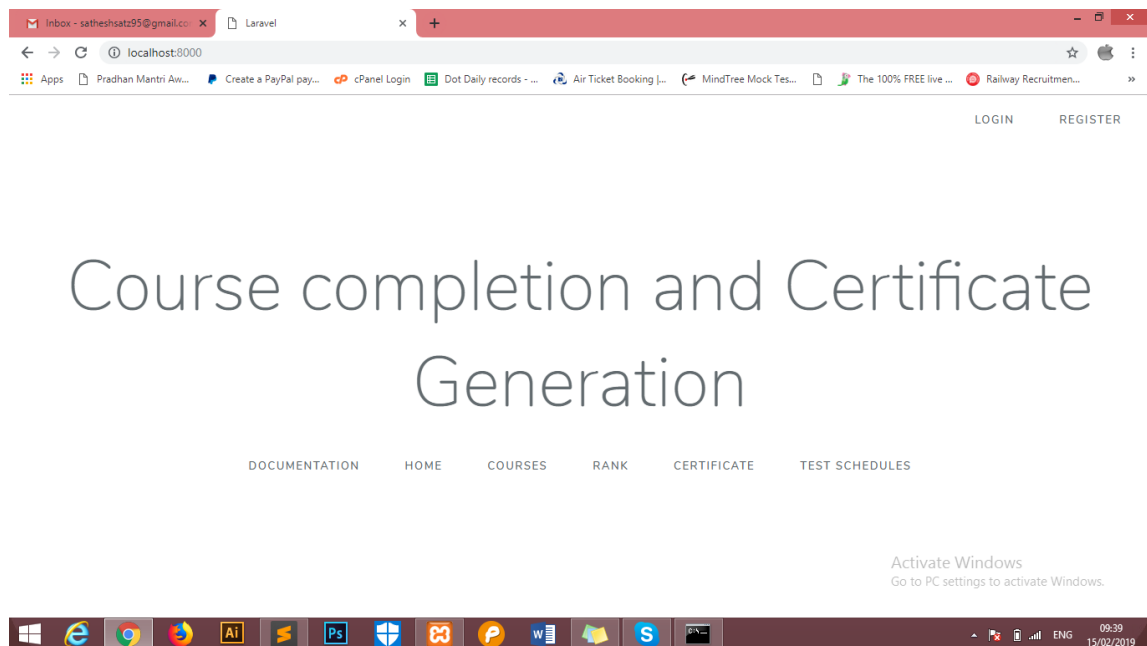


Figure 5.5 System Testing

5.6 VALIDATION TESTING

- Data validation checking is done to see whether the corresponding entries are stored in particular data tables and also to check the data storing. Proper validation checks are done in case of insertion of internal marks in database tables, in order to see that no duplication of data has occurred.
- If any such case duplication data's will find it arises proper warning message will be displayed. In this project the validation testing is done in many forms like adding assignment marks, unit test marks, model exam marks and also in the result
- Only the staffs can access the staff pages for adding the student marks. Other persons cannot access the pages and display the error report as register for login. The staff login should enter with their staff-id and the password. The staff-id and password are given manually by admin.
- Only the students can register and login with their particular register.no and password. This is the main validation testing done in this project.

CHAPTER 6

SYSTEM IMPLEMENTATION

6.1 SYSTEM IMPLEMENTATION

System implementation involves testing the installed system, and it implements a new system to the student`s which make them to easily attract and work as user-friendly application. Implementation also includes all those activities that place to implement a old intranet into new mobile application system. .

Proper implementation is essential to provide a reliable system to the students in a particular department. After successful implementation, students have a chance to provide a feedback about the staff`s. Implementation is a stage of the project when the theoretical design is turned out in to a working system.

Thus it can be considered to be the most critical stage in achieving a successful new system and in giving the user confidence that the new system will work and be effective.

Implementation is a mainly for exclude the new ideas, model, design, specification and process into the system. It make the students to use the mobile application as user-friendly and also attract with effective design.

DEBUGGING

Debugging is the process of detecting and correcting the syntax and logical errors in application. The syntax errors can be detected by the compiler. The diagnosis of logical errors is complicated by the delay, which normally exists the occurrence of actual errors.

Debugging is a multistep process that easily identify a problem and determining a way to work around it.

CONVERSION

Conversion means changing from one system to another. In this project, the system which converts intranet mark system into a mobile application. The objective is to put the

tested system in to operation while holding costs, risks and personnel ideas and design to make as a application.

TRAINING

An analysis of user training focuses on two factors. User capabilities and the nature of the system being installed. Users range from the native to the highly sophisticated.

Developmental research provides interesting insights in to how native users think about new system. They approach it as concrete learners. The distinction between concrete and formal learning says much about what from trainees in general.

POST IMPLEMENTATION AND MAINTENANCE

Every operational system requires periodic evaluation after implementation a post implementation review measures the system's performance against predefined requirements. It is after the fact-after design and conversion is complete. It also provides information to determine whether major design is necessary.

Implementation is a mainly for exclude the new ideas, model, design, specification and process into the system. It make the students to use the mobile application as user-friendly and also attract with effective design.

6.2 MAINTENANCE

Maintenance is the process of changing the software hat is already in operation in order to prevent system failures, to improve the performance, and extended features. Maintenance provides more secure to data`s in database. Maintenance can be classified into

- Adaptive Maintenance
- Perception Maintenance
- Preventive Maintenance
- Corrective Maintenance

6.2.1 ADAPTIVE MAINTENANCE

It deals with adaptive application to change in the environment. It does not lead to change into the system functionality, that is while this project may run in different environments, so it should adaptive according to the operating system and the project should run perfectly.

Modification of a software product performed after delivery to keep a software product usable in a changed or changing environment. Perfective maintenance. Modification of a software product after delivery to improve performance or maintainability.

6.2.2 PERCEPTION MAINTENANCE

Perception maintenance Mainly deals with accommodating the user requirements. It also includes activities to increase the system performance or enhance its user interface. The objective of perspective maintenance is to prevent failures and optimize application maintenance.

6.2.3 PREVENTIVE MAINTENANCE

Retentive maintenance concerns activities aimed at increasing the records maintainability, reliability and availability such as updating the current market price details, giving information about seeds and training details and creating accounts.

6.2.4 CORRECTIVE MAINTENANCE

It deals with the repair or correction of bugs found. This project is designed to be feasible and adaptive and the bugs found are corrected and maintained easily because of the latest technology language used to create this project.

CHAPTER 7

CONCLUSION AND FUTURE ENHANCEMENTS

7.1 CONCLUSION

The preparation of the project “COURSE COMPLETION AND CERTIFICATE GENERATION” is highly interesting and little difficult, but early one however Web Application is very useful to prepare the project. Whatever problem has been faced on this project was solved with this highly flexible Web Application and php,html programming language the earliest and practical solution at the need were arrived of answer as at which use here.

Implementation of the proposed system will reduce the workload of all those involved as the data can be now managed with proper authentication and authorizations instead of being hard copied and accessible to the students and staffs.

This system will largely save the precious time of students, and staffs, instead of using intranet in laptop or PC; they just have to acknowledge entries online with the click of a finger touch. All the technologies i.e. Web Application and Mysqli used for current system and application design and hence freely available for download and also to create a account in google based platform. Web Application provides a strong platform for creating the visual front-end of the mobile application and Web Application, php,html with Mysqli make the application so user-friendly and effective.

- Reduced intranet problem.
- Easy retrieval of information
- Reduced errors due to human intervention
- Portable and flexible for further enhancement
- Mobile Application.

7.2 FUTURE ENHANCEMENTS

1. Provide different type of menu facilities.
2. Provide feedback facility about the staffs.
3. Provide a wishes and events through push notification.
4. Generate a different types of reports.
5. Admin can manage all the students profile.
6. Online notification and email can send through this application.

CHAPTER 8

APPENDICES

A.1 SOURCE CODE

MAINHOME.PHP,HTML

```
packagecom.example.sathis.finalapp;

importWeb Web application.content.Intent;

importWeb Web application.support.v7.app.AppCompatActivity;

importWeb Web application.os.Bundle;

importWeb Web application.view.View;

importWeb Web application.widget.Button;

importWeb Web application.widget.Toast;

public class main_home extends AppCompatActivity {

    Button b1,b2;

    connectivity cd;

    @Override

    protected void onCreate(Bundle savedInstanceState) {

        super.onCreate(savedInstanceState);

        setContentView(R.layout.activity_main_home);

        cd=new connectivity(this);

        if(cd.isconnected()){

            Toast.makeText(getApplicationContext(),"Connected",Toast.LENGTH_LONG).show();

        }

        else{

            Toast.makeText(getApplicationContext(),"Not Connected",Toast.LENGTH_LONG).show();

        }

        finish();

    }

}
```

```

        b1=(Button)findViewById(R.id.staff);

        b2=(Button)findViewById(R.id.student);

b1.setOnClickListener(new View.OnClickListener() {

        @Override

public void onClick(View view) {

                Intent s=new Intent(getApplicationContext(),staff_login.class);

startActivity(s);

        }

});

b2.setOnClickListener(new View.OnClickListener() {

        @Override

public void onClick(View view) {

                Intent s=new Intent(getApplicationContext(),student_login.class);

startActivity(s);

        }

});

}

```

STAFF_LOGIN.PHP,HTML

```

packagecom.example.sathis.finalapp;

importWeb Web application.content.Intent;

importWeb Web application.support.v7.app.AppCompatActivity;

importWeb Web application.os.Bundle;

importWeb Web application.view.View;

importWeb Web application.widget.Button;

importWeb Web application.widget.EditText;

importWeb Web application.widget.Toast;

```

```

public class staff_login extends AppCompatActivity {

    EditText t1,t2;

    Button b1;

    @Override

    protected void onCreate(Bundle savedInstanceState) {

        super.onCreate(savedInstanceState);

        setContentView(R.layout.activity_staff_login);

        t1=(EditText)findViewById(R.id.id);

        t2=(EditText)findViewById(R.id.pass);

        b1=(Button) findViewById(R.id.log);

        b1.setOnClickListener(new View.OnClickListener() {

            @Override

            public void onClick(View view) {

                login();

            }

        });

    }

    private void login() {

        String id=t1.getText().toString();

        String pwd=t2.getText().toString();

        if(id.equals("staff1") && (pwd.equals("mcastaff"))){

            Intent i=new Intent(getApplicationContext(),staff_home.class);

            startActivity(i);

            Toast.makeText(getApplicationContext(),"welcome staff1",Toast.LENGTH_LONG).show();

            return;

        }

        else{

```

```
Toast.makeText(getApplicationContext(),"Values Not  
Valid",Toast.LENGTH_LONG).show();
```

```
return;
```

```
    }
```

```
    }
```

```
}
```

```
STAFF HOME.PHP,HTML
```

```
packagecom.example.sathis.finalapp;
```

```
importWeb Web application.content.Intent;
```

```
importWeb Web application.support.v7.app.AppCompatActivity;
```

```
importWeb Web application.os.Bundle;
```

```
importWeb Web application.view.View;
```

```
importWeb Web application.widget.ImageView;
```

```
public class staff_home extends AppCompatActivity {
```

```
    ImageView i1,i2,i3,i4,i5;
```

```
    @Override
```

```
    protected void onCreate(Bundle savedInstanceState) {
```

```
        super.onCreate(savedInstanceState);
```

```
        setContentView(R.layout.activity_staff_home);
```

```
        i1=(ImageView)findViewById(R.id.assign);
```

```
        i2=(ImageView)findViewById(R.id.unit);
```

```
        i3=(ImageView)findViewById(R.id.model);
```

```
        i4=(ImageView)findViewById(R.id.result);
```

```
        i5=(ImageView)findViewById(R.id.syllabus);
```

```
        i1.setOnClickListener(new View.OnClickListener() {
```

```
            @Override
```

```
            public void onClick(View view) {
```

```

        Intent sa=new Intent(getApplicationContext(),staff_assignment_year.class);
startActivity(sa);
    }
});

i2.setOnClickListener(new View.OnClickListener() {
    @Override
    public void onClick(View view) {
        Intent ut=new Intent(getApplicationContext(),staff_unit_year.class);
startActivity(ut);
    }
});

i3.setOnClickListener(new View.OnClickListener() {
    @Override
    public void onClick(View view) {
        Intent sa=new Intent(getApplicationContext(),staff_model.class);
startActivity(sa);
    }
});

i4.setOnClickListener(new View.OnClickListener() {
    @Override
    public void onClick(View view) {
        Intent sa=new Intent(getApplicationContext(),staff_result.class);
startActivity(sa);
    }
});

i5.setOnClickListener(new View.OnClickListener() {
    @Override

```

```

public void onClick(View view) {

        Intent sa=new Intent(getApplicationContext(),staff_syllabus.class);

startActivity(sa);

        }    });    }}

```

STUDENT LOGIN.PHP,HTML

```

packagecom.example.sathis.finalapp;

importWeb Web application.content.Intent;

import Web Web application.support.v7.app.AppCompatActivity;

importWeb Web application.os.Bundle;

importWeb Web application.text.TextUtils;

importWeb Web application.view.View;

importWeb Web application.widget.Button;

importWeb Web application.widget.EditText;

importWeb Web application.widget.TextView;

importWeb Web application.widget.Toast;

public class student_login extends AppCompatActivity {

    EditText t1,t2;

        Button b1;

    TextView v1;

        String rn="[A-Za-Z]{1,2}"+"[1-9]{1,2}"+"[A-Za-z]{1,3}"+"[0-9]{1,3}";

        @Override

protected void onCreate(Bundle savedInstanceState) {

    super.onCreate(savedInstanceState);

    setContentView(R.layout.activity_student_login);

        t1=(EditText)findViewById(R.id.rid);

        t2=(EditText)findViewById(R.id.pass);

        v1=(TextView) findViewById(R.id.signup);

```



```

        b1=(Button)findViewById(R.id.login);
v1.setOnClickListener(new View.OnClickListener() {

    @Override

    public void onClick(View view) {

        Intent sign=new Intent(getApplicationContext(),student_register.class);
startActivity(sign);

    }

});

b1.setOnClickListener(new View.OnClickListener() {

    @Override

    public void onClick(View view) {

login();

    }    }); }

private void login() {

    String rno=t1.getText().toString().trim();

    String pwd=t2.getText().toString().trim();

    if(!TextUtils.isEmpty(rno) && !TextUtils.isEmpty(pwd)){

        Intent login=new Intent(getApplicationContext(),student_home.class);

startActivity(login);

        Toast.makeText(getApplicationContext(),"Welcome "+rno,Toast.LENGTH_LONG).show();

return; }

else{

    if(rno.equals("") &&pwd.equals("")) {

        Toast.makeText(getApplicationContext(), "Invalid / empty values",
        Toast.LENGTH_LONG).show();

return;

    }    }

```

```
if(rn.matches(rno))

    {

    Toast.makeText(getApplicationContext(),"Valid Register
    No.",Toast.LENGTH_SHORT).show();

    }

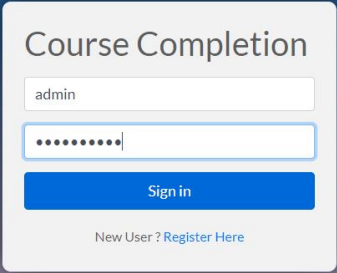
else{

    Toast.makeText(getApplicationContext(),"Invalid Register
    No.",Toast.LENGTH_SHORT).show();

    }  }}
```

A.2 SCREEN LAYOUTS

ADMIN LOGIN :



The image shows a web application interface for an admin login. The background is a gradient of blue and pink. In the center, there is a white login form with a blue border. The form has a title "Course Completion", a username field with "admin" entered, a password field with dots, a blue "Sign in" button, and a link "New User ? Register Here". In the bottom right corner, there is a Windows activation watermark.

Course Completion

admin

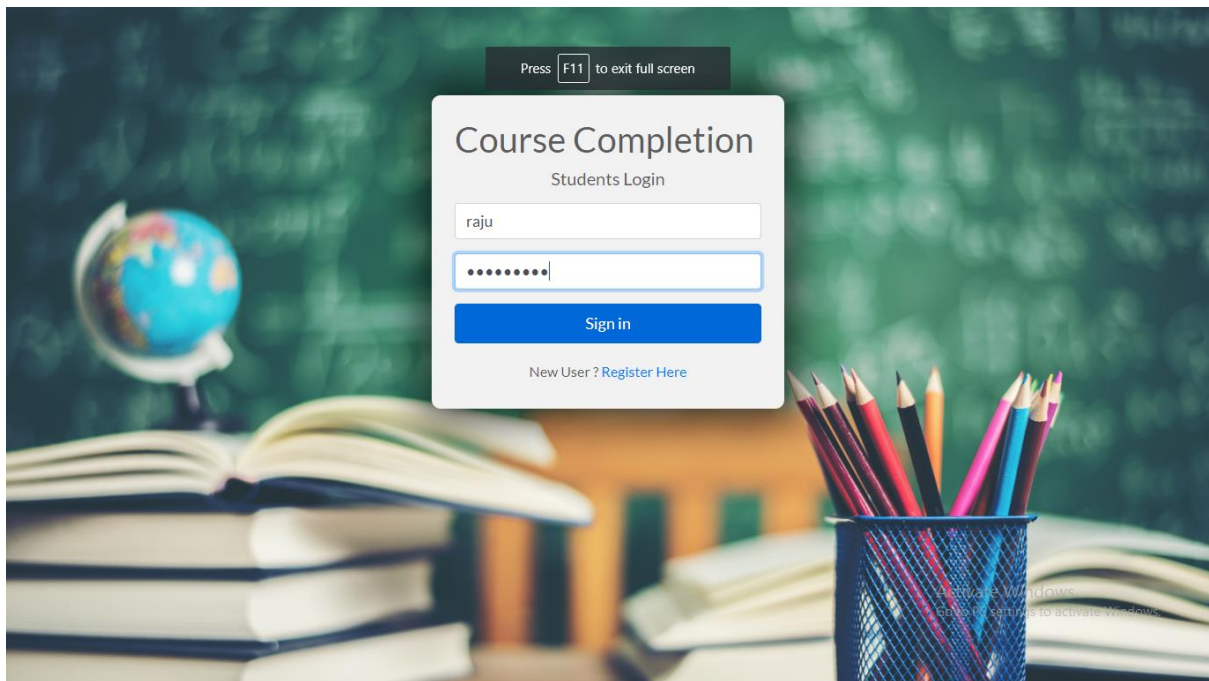
.....

Sign in

[New User ? Register Here](#)

Activate Windows
Go to PC settings to activate Windows.

STUDENT LOGIN :



Press **F11** to exit full screen

Course Completion

Students Login

[Sign in](#)

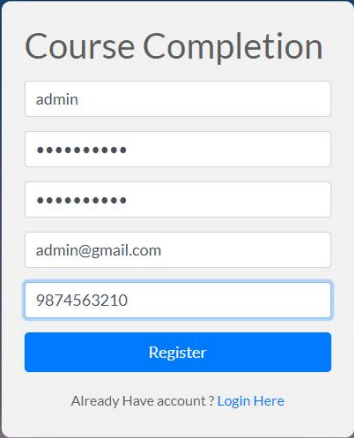
New User ? [Register Here](#)

Activate Windows
Go to Settings to activate Windows.

The background image shows a stack of books, a small globe, and a pencil holder with several colored pencils, all in front of a green chalkboard with faint writing.

The screenshot shows a web browser window with the address bar displaying 'localhost:8000'. The page title is 'Course completion and Certificate Generation'. The navigation bar includes links for 'LOGIN' and 'REGISTER'. The main content area displays the title 'Course completion and Certificate Generation'. The footer shows a Windows taskbar with various application icons and a system clock indicating 09:39 on 15/02/2019.

STAFF LOGIN:



A registration form titled "Course Completion" is centered on a blue-to-pink gradient background. The form contains five input fields: a username field with "admin", two password fields with masked characters, an email field with "admin@gmail.com", and a phone number field with "9874563210". Below the fields is a blue "Register" button. At the bottom of the form, there is a link: "Already Have account ? [Login Here](#)".

Course Completion

admin

.....

.....

admin@gmail.com

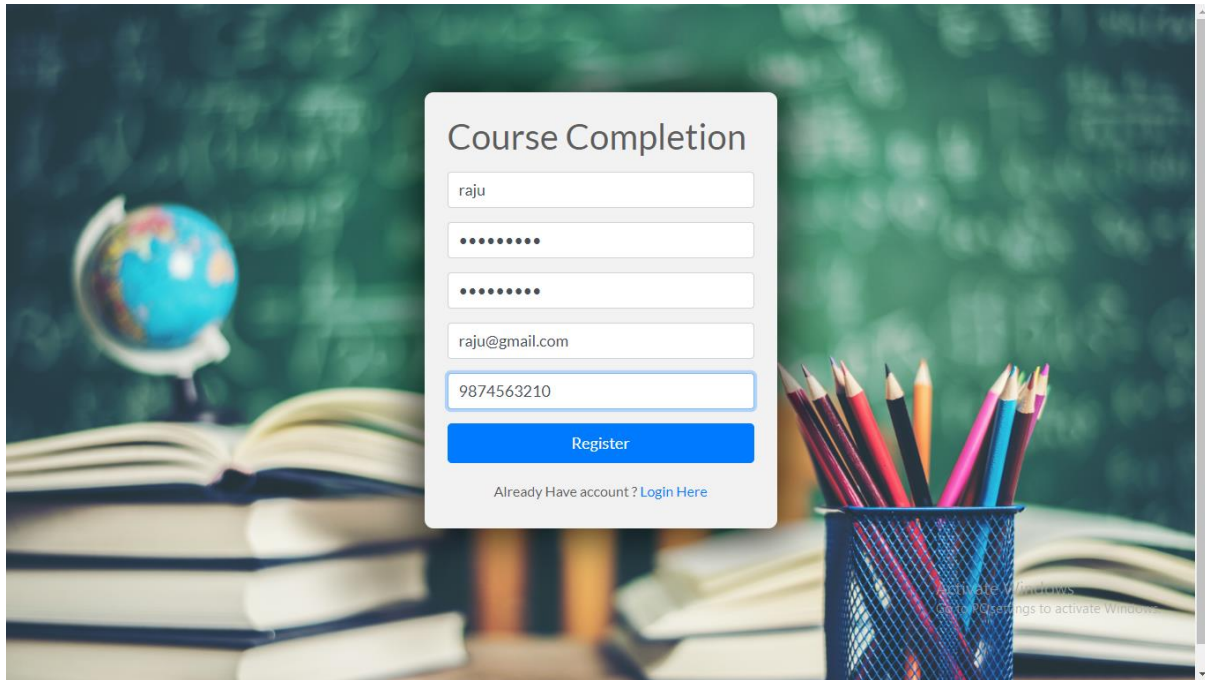
9874563210

Register

Already Have account ? [Login Here](#)

Activate Windows
Go to PC settings to activate Windows.

STUDENT REGISTRATION



The background image shows a study desk with a stack of books, a small globe, and a pencil holder with several colored pencils. A chalkboard with faint writing is visible in the background. A semi-transparent white registration form is centered over the image.

Course Completion

Register

Already Have account ? [Login Here](#)

A.3 REFERENCES

A.3.1. Book References

1. DhrubajyotiGogoi, “Web Web application Based Emergency Alert Button”International Journal of Innovative Technology and Exploring Engineering(IJITEE) ISSN:2278-3075,Volume-2,Issue-4,March 2013.
2. Amit Kushwaha, “Location Based Services using Web Web application Mobile Operating System”,International Journal of Advances in Engineering and Technology,March 2011. Reito meier,Professional “Web Web application Application Development”.
3. L.Hariprasath1,R.Dhivya2,S.Adithya3, “Emergency Alert System Using Web Web application” IJREAT International Journal of Research in Engineering & Advance Technology,Volume 1,Issue 1,March2013.
4. P.Kalyanchakravarthy1,T.Lakshmi2,R.Rupavathi2,S.Krishnadilip2,P.Lakshman Kumar2, “Web Web application Based Safety Triggering Application”(IJCSIT) International Journal Of Computer Science and Information Technologies,Vol.5(1),March2014.
5. Bhaskar Kamal Baishya, “Mobile Phone Embedded With Mobile and SecuritynApplications” IOSR Journal of Computer Engineering(IOSR-JCE) May-June2014
6. Web Web application Programming: The Big Nerd Ranch Guide Kindle Edition by Brian Hardy, Bill Phillips.
7. Web Web application Design Patterns: Interaction Design Solutions for Developers Kindle Editionby Greg Nudelman.
8. Web Web application User Interface Design: Turning Ideas and Sketches into Beautifully Designed Apps (Usability) Kindle Edition by Ian G. Clifton.
9. Web Web application Recipes: A Problem-Solution Approach 1st ed. 2011 Edition by Jeff Friesen, and Dave Smith.
10. Hello, Web Web application: Introducing Google's Mobile Development Platform (Pragmatic Programmers) Third Edition by Ed Burnette.

A.3.2. Online References

1. [https://www.slideshare.net/martyhall/Web Web application-tutorial-layouts-organizing-the screen](https://www.slideshare.net/martyhall/Web-Web-application-tutorial-layouts-organizing-the-screen)
2. [http://www.vogella.com/tutorials/Web Web application/article.html#using-views-and-view-groups-to-design-the-user interface](http://www.vogella.com/tutorials/Web-Web-application/article.html#using-views-and-view-groups-to-design-the-user-interface)
3. [https://www.Web Web applicationauthority.com/Web Web application-studio-tutorial-beginners-637572/](https://www.Web-Web-applicationauthority.com/Web-Web-application-studio-tutorial-beginners-637572/)
4. [https://medium.com/sketchware/activity-lifecycle-in-Web Web application-applications-1b48a7bb584c](https://medium.com/sketchware/activity-lifecycle-in-Web-Web-application-applications-1b48a7bb584c)
5. [https://stackoverflow.com/questions/8515936/Web Web application-activity-life-cycle-what-are-all-these-methods-for](https://stackoverflow.com/questions/8515936/Web-Web-application-activity-life-cycle-what-are-all-these-methods-for)
6. [https://www.Web Web applicationtutorialpoint.com/Mysqli/Mysqli-Web Web application-tutorial-getting-started/](https://www.Web-Web-applicationtutorialpoint.com/Mysqli/Mysqli-Web-Web-application-tutorial-getting-started/)
7. <http://www.vogella.com/tutorials/Mysqli/article.html>
8. [https://Mysqli.google.com/docs/database/Web Web application/read-and-write](https://Mysqli.google.com/docs/database/Web-Web-application/read-and-write)
9. [https://www.captchconsulting.com/blogs/Mysqli-realtime-database-Web Web application-tutorial](https://www.captchconsulting.com/blogs/Mysqli-realtime-database-Web-Web-application-tutorial)
10. <https://www.simplifiedcoding.net/Mysqli-realtime-database-crud/>
11. <https://cloud.google.com/solutions/mobile/mobile-Mysqli-app-engine-flexible>