SAVITRIBAI PHULE PUNE UNIVERSITY

A PRELIMINARY PROJECT REPORT

ON

ANDROID APP FOR PERSONAL DATA SECURITY USING CLOUD COMPUTING

SUBMITTED TOWARDS THE PARTIAL FULFILLMENT OF THE REQUIREMENTS OF

BACHELOR OF ENGINEERING (COMPUTER ENGINEERING)

BY

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UNDER THE GUIDANCE OF

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2019-2020

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CERTIFICATE

This is to certify that the project titled

ANDROID APP FOR PERSONAL DATA SECURITY USING CLOUD COMPUTING

Submitted By

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is a bonafide work carried out by Students under the supervision of Prof. Amit Gadekar and it is submitted towards the partial fulfilment of the requirement of Bachelor of Engineering (Computer Engineering) Project during academic year 2019-20.

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Abstract

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Keywords:*add data here*

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It gives us a great pleasure in presenting the preliminary project report on **Android App For Personal Data Security Using Cloud Computing.**

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Yash Garudkar
Anushree Sisodia
Mohit Sonawane
(B.E. Computer Engineering)

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CHAPTER 3
PROJECT PLAN

A project plan is a formal document designed to guide the control and execution of a project. It is the key to a successful project and is the most important document that needs to be created when starting any business project. A typical project plan consists of: A statement of work, a resource list, work breakdown structure, a project schedule and a risk plan. The scope includes the business need and business problem, the project objectives, deliverance's, and key milestones. Project baselines are established in the project plan.

3.1 PROJECT ESTIMATES

Project estimates are projections of costs, task completion times and resource needs for a project, often broken down by activity. Estimates are the basis for plans, decisions and schedules and their accuracy is critical.

3.1.1 RECONCILED ESTIMATES

Reconciled Estimates is the method of bringing together all of the data and analyses into one final estimate of value and finding the approximation, which is a value that can be used for some purpose even if input data may be incomplete, uncertain, or unstable. It determines how much money, effort, resources, and time it will take to build a specific system or product.

COST ESTIMATE

A cost estimate is the approximation of the cost of a program, project, or operation. It is the product of the cost estimating process. The cost estimate has a single total value and may have identifiable component values.

TIME ESTIMATE

A time estimate is the approximation of the time of a program, project, or operation. It is the product of the time estimating process. The time

estimate is generally the approximate time taken in hours or other time unit to complete a given task or the process.

3.1.2 PROJECT RESOURCES

A resource is a necessary asset whose main role is to help carry out a certain task or project. A resource can be a person, a team, a tool, finances, and time. Most projects require many different resources in order to be completed. Resources should be assessed and allocated before a project begins. The general resources which are required to develop our project are categorized into two parts hardware and software resources required.

- **HARDWARE**: Smart Phone with: 1 GB RAM, 1 GHz or higher Clock Processor; Computer with: Internet connection, Internet Browser.
- **SOFTWARE**:Flutter, Firebase, GCP (Google Cloud Platform), React, Node.js

3.2 RISK MANAGEMENT W.R.T. NP HARD ANALYSIS

This section discusses Project risks and the approach to managing them.

3.2.1 RISK IDENTIFICATION

For risks identification, review of scope document, requirements specifications and schedule is done. Answers to questionnaire revealed some risks.

1. Software and customer managers formally committed to support the Project.
2. End-users enthusiastically committed to the project and the system/product to be built.

3. Requirements fully understood by the group.
4. End-users have realistic expectations from the Project as it is going to be used on field as well as off field.
5. Whole group has adequate knowledge of Technologies and Softwares to be used.
6. Out of the multiple functionalities requirement provided by Customer/user, only few of them are being implemented.
7. Number of people on the project team are adequate to do the Project and their respective contribution
8. All the customers/users who are going to use the Application, know the importance of the project and its requirement

3.2.2 RISK ANALYSIS

The risks for the Project can be analyzed within the constraints of time and quality.

3.3 PROJECT SCHEDULE

3.3.1 PROJECT TASK SET (Major Tasks in the Project stages are):

- Task 1:
- Task 2:
- Task 3:
- Task 4:
- Task 5:

3.3.2 TASK NETWORK

Project tasks and their dependencies are noted in this diagrammatic form.

3.3.3 TIMELINE CHART

A project timeline chart is presented. This may include a time line for the entire project.

3.4 TEAM ORGANIZATION

Team is well organized and Roles of each members are assigned for respective contributions.

3.4.1 TEAM STRUCTURE

Team structure/Role for each member of group is defined. Responsibilities/Tasks divided are as per Technology and Tools to be used. Divided tasks are Android/iOS Application Development using Flutter, Database Management using Firebase, Back-end algorithm for Prediction and other functionalities, Documentation and Report.

3.4.2 MANAGEMENT REPORTING AND COMMUNICATION

Report book is being maintained by Guide and Reviewer with regular entries of updates and status of project implementation and related work in every 15 days.

CHAPTER 4
SOFTWARE REQUIREMENT SPECIFICATION

4.1 INTRODUCTION

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4.1.1 PURPOSE AND SCOPE OF DOCUMENT

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4.1.2 OVERVIEW OF RESPONSIBILITIES OF DEVELOP

They are responsible for the design, testing and maintenance of software programs for computer operating systems or applications, such as word processing or database management systems.

4.2 USAGE SCENARIO

This section provides various usage scenarios for the system to be developed.

4.2.1 USER PROFILES

1. Shop Employee (Cashier)
2. Customer (Buyer)
3. Government Officials

4.2.2 USE-CASES

All use-cases for the software are presented. Description of all main Use cases using use case template is to be provided.

Sr No.	Use Case	Description	Actors	Assumptions
1	Use Case 1	Description	Actor	Assumption

Table 4.1: Use Cases.

4.2.3 USE-CASE VIEW

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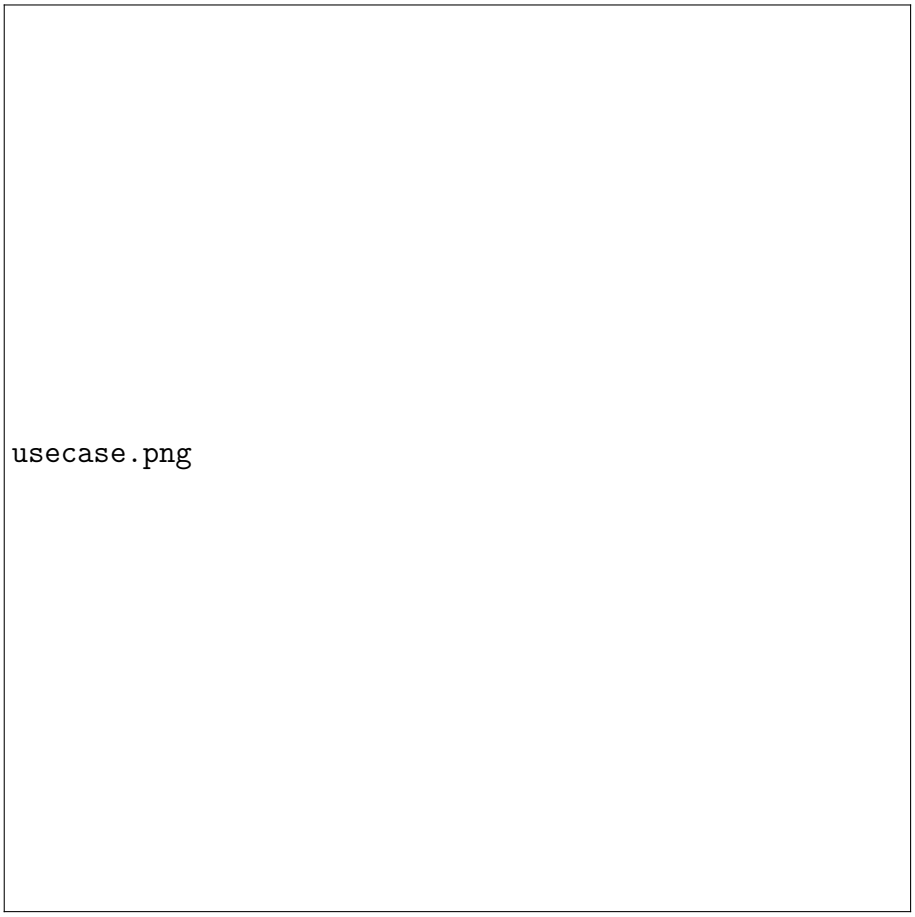

Figure 4.1: Use Case Diagram

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4.3 DATA MODEL AND DESCRIPTION

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4.3.1 DATA DESCRIPTION

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4.3.2 DATA OBJECTS AND RELATIONSHIPS

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4.4 FUNCTIONAL MODEL AND DESCRIPTION

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4.4.1 DATA FLOW DIAGRAM

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Level 0 Data Flow Diagram

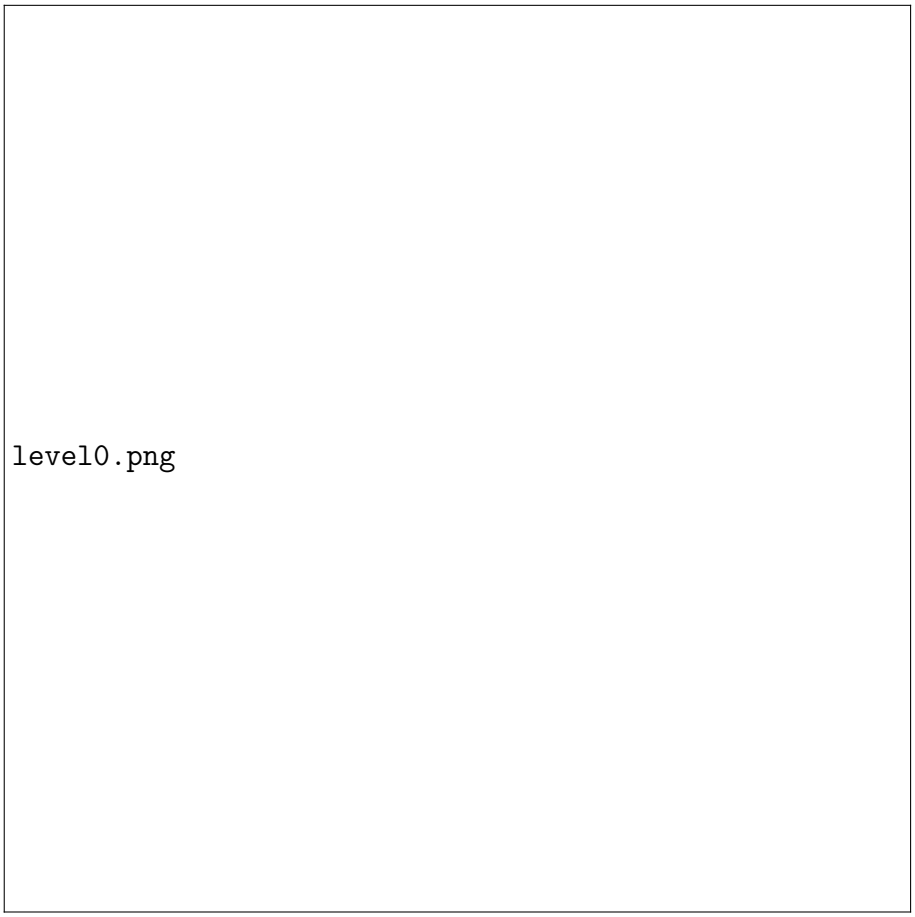

Figure 4.2: Level 0

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Level 1 Data Flow Diagram

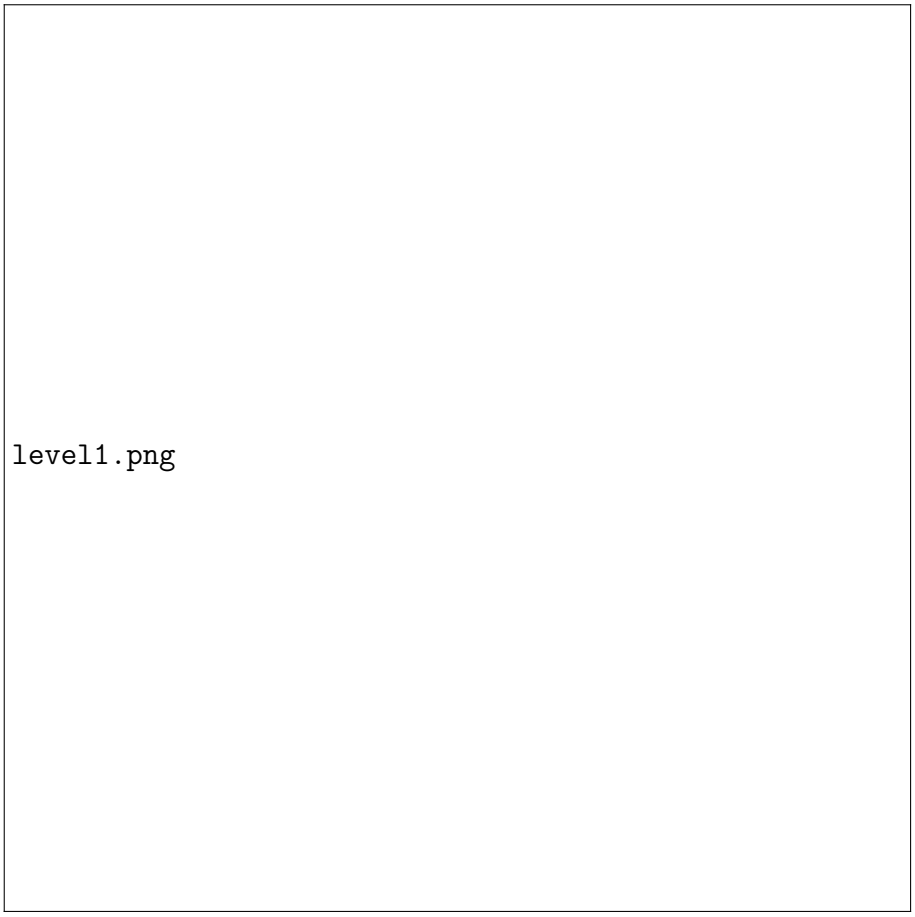

Figure 4.3: Level 1

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4.4.2 DESCRIPTION OF FUNCTIONS

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4.4.3 ACTIVITY DIAGRAM

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Figure 4.4: Activity Diagram

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4.4.4 NON FUNCTIONAL REQUIREMENTS:

1. **Performance Requirements:**
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2. **Safety Requirements:**
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3. **Security requirements:**
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4. **Software Quality Attributes:**
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4.4.5 STATE DIAGRAM

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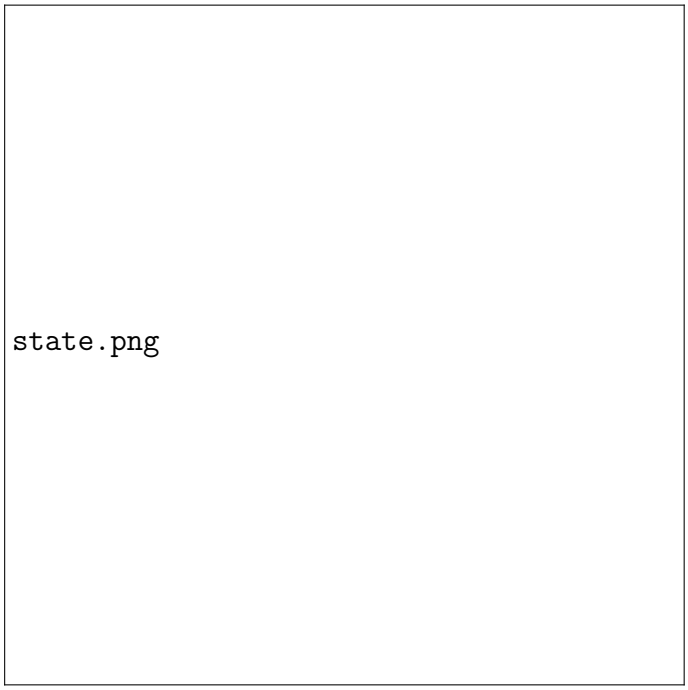

Figure 4.5: State Diagram

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4.4.6 DESIGN CONSTRAINTS

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4.4.7 SOFTWARE INTERFACE DESCRIPTION

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CHAPTER 5
DETAILED DESIGN DOCUMENT

5.1 SYSTEM DESIGN

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5.2 SYSTEM ARCHITECTURE

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Figure 5.1: System Architecture Diagram

Figure 5.2: Shop Registration Diagram

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5.3 DATA DESIGN (USING APPENDICES A AND B)

A description of all data structures including internal, global, and temporary data structures, database design (tables), file formats.

5.3.1 INTERNAL SOFTWARE DATA STRUCTURE

Data structures that are passed among components the software are described.

5.3.2 GLOBAL DATA STRUCTURE

Data structured that are available to major portions of the architecture are described.

5.3.3 TEMPORARY DATA STRUCTURE

Files created for interim use are described.

5.3.4 DATABASE DESCRIPTION

Database(s) / Files created/used as part of the application is(are) described.

5.4 COMPONENT DESIGN

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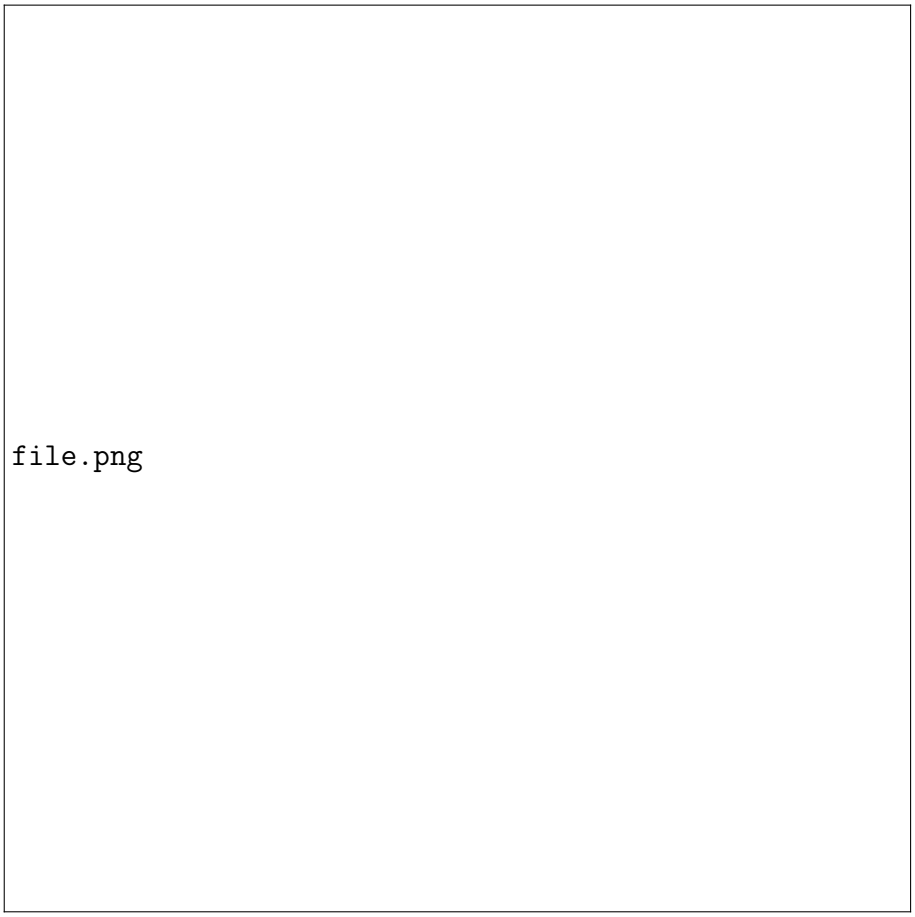

Figure 5.3: Class Diagram

CHAPTER 6
SUMMARY AND CONCLUSION

6.1 CONCLUSION

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CHAPTER 7
REFERENCES

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