Online examination system Group No: 21

Software Requirement Specification

CS 223 Submitted to: Professor Samit Bhattacharya

By

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1. Introduction:

1.1 Purpose

The objective of the app to develop an app that gives access of conducting online examination (Mobile can be used as a client). This Mobile app gives access of conducting Online Examination worldwide. It allows more number of candidates (Students) to give the exam at the same time and would give the result at the end of the examination and thereby saves time of students as well as teachers . This app would reduce the wastage of paper and would lead to a better environment . It eliminates the usage of the items like paper, pen ,...etc. User can login with their preassigned ids and can give test . While the Administrator can create question paper , conduct examination and also give result .

1.2 Intended Audience and Reading Suggestions

This document is intended for Developers, User, Tester, Project manager, Documentation writers and other people currently reading this report. This report consist of Description, functional, Non-functional and other requirement used for making of Mobile based online examination portal. It is advised for reader to go through the content table in the beginning and read there related part of the report.

1.3 Product Scope

The product we produce can be used by all the users who can control and use an android phone. We will try to implement an interactive UI which helps the user to learn how to give the online examination and so the earlier knowledge of using a mobile app for giving online examination is not required.

This Mobile based Online examination app has very vast scope than its counterparts including pen and paper way of examination.

- **a.** This app could used in educational institutes .
- b. User does not need to be in a certain area to give examination as this way does not have any physical boundary .

- c. Saves time for both student and invigilator as they could give exam from anywhere.
 - d. Would reduce wastage of paper.
 - e. Users could get result after the examination saving lot of time.
 - f. No need of the presence of the examiner for the candidate to take test.
 - g. No manual work of preparing and storing the result.
 - h. For few students, it saves a lot of time going to far away centres to give examination

1.4 References

Notes by Samit Bhattacharya Sir.

2. Overall Description:

2.1 Product Perspective

Online examination system is available 24*7, this app will allow Users from very far way places giving same examination and would reduce the gap between the society.

2.2 User Class and Clasification

User can be classified into two categories:

- a. Administrator: Administrators will have ability to conduct examination and set its rules.
- b. Candidate: Can give examination in there respected discipline.

2.3 Operating Environment

This online examination app need an android smartphone and internet connection to connect to the server.

2.4 Design and Implementation Constraints

Candidate can give examination from anywhere in the world wherever candidate could get online. Candidate could login with valid id and password. While giving examination candidate will be given only a set amount of time which should be show during the examination, after the exam is completed the result would be shown. During exam candidate could jump to the question of he's/her's choice.

2.5 User Documentation

The product will contain a user manual, user manual will include system requirement, technical details and contact information.

3 Functional Requirements:

3.1) Availability:

Product will be avilable as app on Play store which could be free of cost and would be easily downloadable .

3.2)Role selection:

This function will allow user to defferentiate between themselves as candidate or Examiner.

3.3) Registration Panel:

This function will allow the user to register for the examination.

3.4) Login Panel:

This function will allow the allow user to login using correct credential in a particular role. User with Incorrect credentials in a particular role cannot proceed and can only enter with correct credential.

3.5) Candidate features:

3.5.1 Course selection :

Candidate will be allowed to select course from the given courses offered by the examiner. Candidate can also unenroll from course whenever candidate wants to or when the course is finished.

3.5.2 Discussion Panel:

Candidates will post there quries in this panel and will get and will get the answers from examiner or administrator. The timing of examination also be posted in this section .

3.5.3 Examination:

On the preprescibed timing candidates will be allowed to give examination .the format of examination will bw multiple choice answer type.

→Guidelines and Weightage section :

This section will contain weightage of each question, time -limit of examination and other guidelines and regulation of examination. This section can be accessed any time during the examination.

→Clock:

As time management is most important in examination therefore our app would be provideing an timer which would tell about time elasped and remaining time in examination. This clock would be accessible during the whole examination and could be seen above the Q&A panel.

→ Questions Panel :

This panel will contains serial number of each question in the examination candiadte can easily go to any question by simply clicking on any of the given question number. This panel would be avilable during entire examination and would help in going from quickly going from one question to another.

→ Multiple Choice Panel:

This panel will contain the choice of a particular question. Candiate can select any of the give choices and save the result.

→ Movement Panel:

This panel will allow candidate to move to direct next question or immediate previous question . This also allow user to go from Multiple choice panel to Question panel allowing Candidate to go toggle from any question to another .

→ Finalising Panel:

This feature will enable user to finalise all the answer he has chosen and end the test.

3.5.4 Result:

One of the best feature of online examination is getting result direct after the ending of the examination so that the candidate doesn't have to wait for long delay of answer checking and getting result. At the examination there would be panel giving marks of candidate and also the rank of candidate for relative comparison.

3.6 Examiner functions:

3.6.1 Course Control:

User who enter the app with Examiner credential will be able to create there own course .

3.6.2 Discussion Panel:

Examiner would be able to provide explanations and answers.

3.6.3 Examination Control:

Examiner will be able to control the examination in many ways some of the ways are :

- → Examiner will be able to set the date and timing of the examination.
- \rightarrow Examiner will be able to set the marking scheme and of the examination .

Functional Hierarchy

- 1. Availability
- 2. Role Section
- 3. Registration Panel
- 4. Login Panel
- 5. Candidate Features
 - 5.1 Course selection
 - 5.2 Examination
 - 5.3 Finalising Panel
 - 5.4 Result

6. Examiner Functions

- 6.1 Course Control
- 6.2 Examination Control

2.4 Non Functional Requirements:

4.1 Security:

Only the users with preregistered account can give examination.

Answers entered by candidate can not changed by examination.

Marks would be provided just after the exam so that no illegal change in answers happen.

4.2 Logging:

Candidates can login by 3^{rd} party account such as gmail or users can also login by there registered account on the app servers. The examiners can only login via registered account .

4.3 Storage:

Storage will be done on cloud server .

4.4 Assumptions and Dependencies:

- a Proper working of this app would depend upon the internet connection.
- **b** Some Assumption while making this app are:
- c It is assumed that user has basic knowledge of using an smartphone as user will be responsible for any action taken by user during examination
- **d** It is assumed that data entered by user is true as there is no means of verifying.
- e It is assumed that candidiates doesn't cheat as there would not be anyone-to-monitor.

4.5 Legal, Copyright and Other Notices

- a. The code of the app is closed-source and hence is prohibited to be sold/tampered with or copied.
- b. The information provided by each of the customers (museums) is highly confidential. Any external attack on this data will be dealt by strict legal action in court of law.
- c. The name of the app will be copyrighted and hence shall be not used to name any other app in the future.
- d. The app is available only in the SAARC countries and some handpicked other countries. Users shall not attempt to download/use the app from any other nation where the app is prohibited.