***SOFTWARE REQUIREMENTS SPECIFICATION***

Project Title: Find your professors

Team members

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**1.0 Introduction**

This section provides an overview of the entire requirement document. This document describes all data, functional and behavioral requirements for software.

**1.1 Goals and objectives**

The main goal of this project is to help students in scheduling an appointment with the professors based on the availability.

**1.2 Statement of scope**

A working android application connected to a live database will be delivered. This application is restricted to android mobile phones. x

**1.3 Software context**

This application will use android studio application for development and MSSQL for database. For testing, it is expected to have MSSQL, and android studio installed. Coding is done is Java and UI design using XML.

**1.4 Major constraints**

This application is only available in android phones and not on IOS.

**2.0 Usage scenario**

This section provides a usage scenario for the software. It organized information collected during requirements elicitation into use-cases.

**2.1 User profiles**

User can be either Student/Professor.

**2.2 Use-cases**

* Users can sign up using the application.
* Validations made during sign up:
  + Username cannot exceed 60 letters and will accept only letters. No numbers or special characters are allowed.
  + Two users cannot have same username or email address.
  + Email address will be validated i.e., every email address should follow the email address constraints.
  + Password cannot be less than 6 digits and greater than 10 digits.
  + Password should contain an upper case, lower case, number and few special characters.
  + All the fields must be filled.
* Users can login into the app using login page.
* Validation made during login:
  + Username should be present in the database.
  + Username and password should match from the database.
  + Username and password field cannot be blank.
* Users can get their passwords via email using “forgot password” functionality.
* Student’s functions:
  + When a student logs into the application, all the list of professors will be shown.
  + A student can select one professor by clicking on the button.
  + All the available slots will be shown of the selected professor.
  + By clicking on the available slots and selecting “OK”, the appointment will be scheduled.
  + As soon as an appointment is scheduled, an email will be sent to professor and student.
* Professor’s functions:
  + When a professor logs into the application, all the appointments scheduled with them will be seen.
  + A professor can delete a particular appointment.
  + As soon as an appointment is deleted, an email will be sent to the professor and student with the cancelled appointment details.
* An error message will be shown when the network is down.

**2.3 Special usage considerations**

N/A

**3.0 Data Model and Description**

This section describes information domain for the software

**3.1 Data Description**

Microsoft SQL server is used to store the data.

**3.1.1 Data objects**

SQL tables and stored procedures will be used to work with data.

**3.1.2 Relationships**

The database tables are linked with each other using primary and foreign key constraints

**3.1.3 Complete data model**

An ERD for the software is developed

**3.1.4 Data dictionary**

Will be provided in next version.

**4.0 Functional Model and Description**

A description of each major software function and software interface is presented.

**4.1.** **Description of Major Functions**

Each requirement is uniquely identified.

**4.1.1 Requirement 1**

* Users can sign up using the application.
* Validations made during sign up:
  + Username cannot exceed 60 letters and will accept only letters. No numbers or special characters are allowed.
  + Two users cannot have same username or email address.
  + Email address will be validated i.e., every email address should follow the email address constraints.
  + Password cannot be less than 6 digits and greater than 10 digits.
  + Password should contain an upper case, lower case, number and few special characters.
  + All the fields must be filled.

**4.1.2 Requirement 2**

* Users can login into the app using login page.
* Validation made during login:
  + Username should be present in the database.
  + Username and password should match from the database.
  + Username and password field cannot be blank.

**4.1.3 Requirement 3**

* Users can get their passwords via email using “forgot password” functionality.
* An email should be sent to the users with the password details.

**4.1.4 Requirement 4**

* Students should be able to schedule an appointment with the professor.
  + When a student logs into the application, all the list of professors will be shown.
  + A student can select one professor by clicking on the button.
  + All the available slots will be shown of the selected professor.
  + By clicking on the available slots and selecting “OK”, the appointment will be scheduled.
  + As soon as an appointment is scheduled, an email will be sent to professor and student.

**4.1.5 Requirement 5**

* Professors should be able to delete an appointment.
  + When a professor logs into the application, all the appointments scheduled with them will be seen.
  + A professor can delete a particular appointment.
  + As soon as an appointment is deleted, an email will be sent to the professor and student with the cancelled appointment details.

**4.1.6 Requirement 6**

* Run time errors like network issues will be handled.
  + An error message will be shown on the screen if there is a network issue. User should not be able to move forward if this happens.

**4.2 Software Interface Description**

The software interface(s) to the outside world is(are) described.

**4.2.1 External machine interfaces**

N/A

**4.2.2 External system interfaces**

Gmail server will be used to send emails.

**4.2.3 Human interface**

N/A

**5.0 Restrictions, Limitations, and Constraints**

This application is not for IOS devices.