# SOFTWARE ENGINEERING CS301

# SOFTWARE REQUIREMENT SPECIFICATION

# MIETEN-PLACEMENT CELL ANDROID APPLICATION

# **GROUP MEMBERS-**

Kumari Renuka(U101115FCS111) Rishabh K Kandoi(U101115FCS283) Shailesh Mohta(U101115FCS305) Luvkush Singh(U101115FCS113) Kshiteej Manoj Gilda(U101115FCS110) Manik Garg(U101115FCS199)

# 1. Introduction:

"Mieten©" is basically an android application, which will enable students of NIIT University with features related to internships, campus placements, job recruitments related news, etcetera.

# 1.1 Purpose:

The process of placements and management of the same is trivial, less efficient in our organisation (NU), as per one of the spokesperson from the Placement Committee Cell.

# From Student's point of view,

- Only method of communication is university email, SMS.
- Students have to get in touch with the placement committee members to get the job/internship related information.
- Sometimes, urgent intimation of any information is required to the students from the Placement Cell, which students tend to miss the mail.
- There is a lot of paperwork, students do have to visit the placement cell numerous times even for minute requirements, leads to waste of time.

#### From Placement Cell Member's point of view,

- They have to wait for student's response for any mail they send. If the student does not reply, they have to send multiple reminders.
- It becomes more difficult to deal with, if from the large database, you need to send the reminders to a subset of students, typing their name individually into the mail.
- If there is any change in the Google docs form they create, e.g. two more new fields are required, then they have no other choice then to re-create doc and discard the already filled form
- No special interface for Placement related news, they have to mass mail the information or any news, urgent intimations as well.

So, this project is an attempt to overcome these drawbacks in NIIT University.

# **1.2 Scope:**

We describe what features are in the scope of the software and what are not in the scope of the software to be developed.

# In Scope:

- a. Application for Internship/Job by the students of NIIT University.
- b. Student can retrieve information about the internships/jobs.
- c. Placement Cell's communication about the placement related news to Student using the app.
- d. Preparation for aptitude test.

# Out of Scope:

- a. Selection process for any internship.
- b. There is no communication among the NIIT University and Industries via this application.

# 1.3 Definitions, Acronyms, and Abbreviations:

# Acronyms and Abbreviations:

- a. "Mieten©": Copyrighted app name.
- b. SRS: Software Requirement Specification

#### **Definitions:**

- a. Placement Cell: A department in NIIT University which takes care of placement related issues of their students.
- b. "Mieten©": An Application for NIIT University's Students and Placement Cell for effective administration and management of the Placement related issues.

#### 1.4 References:

**IEEE SRS Format** 

#### 1.5 Overview:

The rest of this SRS is organized as follows: Section 2 gives an overall description of the software. It gives what level of proficiency is expected of the user, some general constraints while making the software and some assumptions and dependencies that are assumed. Section 3 gives specific requirements which the software is expected to deliver. Functional requirements are given by various use cases. Some performance requirements and

design constraints are also given.

# 2. Overall Description:

# 2.1 Product Perspective:

"Mieten©" is aimed to increase the efficiency of Placement Cell Committee of NIIT University of effective conduct of the Placement process and to overcome the problems of current management faced by both, Students as well as the Placement Cell of NIIT University. One-click feature of the apps will reduce the paperwork, save a lot of time of students who have to visit the Placement Cell for small reasons at times. Overall, this application will reduce the trouble of Placement Cell of records management of students, communication with them in case of an emergency, etc.

# 2.2 Product Functions:

"Mieten©" supports the following use cases:

Use cases	Description of use cases	
Admin:		
Authorized login	Allows Admin to login.	
Insert Company	Admin can add a new company profile.	
Approve Students Job Profile	Admin can approve the details filled in by the student.	
Updates about page	Admin can make changes to the 'About us' page.	
View Student's Profile	Admin can view the profile of any student he wishes to and check if he has uploaded all the necessary documents or submitted a particular document.	
View/Answer FAQ	Admin can view the frequently asked questions posted by the NIIT University Student's on the FAQ page and answer them.	
Upload Sample Papers	Admin can upload sample papers of questions similar to which students can expect in the interviews.	
Student:		
View About page.	Allows students to view about NIIT University page and Placement Cell.	
View Sample Papers	Student downloads sample aptitude papers.	

Student login	Allows student to login.
Upload Documents	Students upload missing documents upon being notified of the same by the admin.
Follow Jobs	Enables to check the status of the job application.
View / Update Profile	Student is able to view or update their profile
View FAQ	Student can view the Frequently Asked Questions (FAQ).
View Contact Page	Student can view the contact details of Placement Cell of NIIT University.
Post FAQ	Student can post FAQ regarding any queries related.
View/Change Preferences	Student can change Preferences of the job according to their requirements if they are willing to and can view them later.
Apply and View job listings	Students can view the job listing and can apply for the job of their choice.

# 2.3 User Characteristics:

**a**. The user should be familiar with the operation of Android Device and Applications.

# 2.4 Principal Actors:

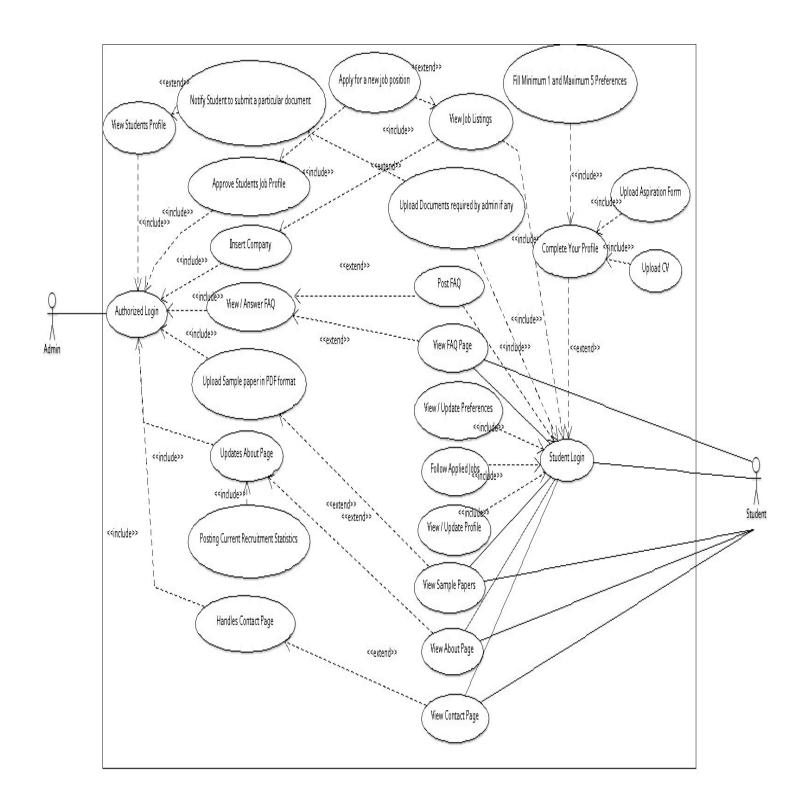
The two principal actors in "Mieten©" are "Admin" and "Students".

# 2.5 General Constraints:

- b. Working of "Mieten©" requires Internet connection.
- c. "Mieten©" is a single-user Application. Every student must have this application on their android device.

# 2.4 Assumptions and Dependencies:

- a. Working of "Mieten©" is dependent on the availability of Internet connection.
- b. Admin must be active to insert all the required informations on the app.



# 3. Specific Requirements:

# 3.1 Functional Requirements:

We describe the functional requirements by giving various use cases.

# Use Case 1:

Name: Authorized login

Summary: Allows Admin to login.

Actors: Placement Cell Committee / Admin

# **Pre-conditions:**

• Internet connectivity.

• Only for allowed mail ids.

#### Main success scenario:

· Admin clicks on login button.

• App checks for the authorization of login.

# **Extension:**

Id or password incorrect. Shows error dialog box.

#### **Post-condition:**

Admin can now access all features of the app.

# Use Case 2:

**Name:** View About page.

**Summary:** Allows students to view about NIIT University and information on companies visited till date and

number of students recruited.

**Actors:** NIIT Students

# **Pre-conditions:**

- Internet Connectivity.
- Admin must upload some data on About page.

#### Main success scenario:

- Student clicks on About page tab.
- Student can view all data shown there.

**Extension: NIL** 

**Post-condition:** NIL

# **Use Case 3:**

Name: View Sample Papers

**Summary:** Student downloads sample aptitude papers.

**Actors:** NIIT Students

# **Pre-conditions:**

- Internet connectivity.
- Admin must upload a sample paper

# **Main success scenario:**

- Student clicks on sample papers tab.
- Student chooses from given sample papers.
- Student downloads the sample paper.

#### **Extension:**

Error in downloading. Shoes error dialog box. Occurs due to poor internet connectivity.

#### **Post-condition:**

Student can now open the downloaded paper(s).

#### Use Case 4:

Name: Student login

**Summary:** Allows student to login.

**Actors:** NIIT Students

#### **Pre-conditions:**

Internet connectivity.

Requires student mail id to login.

### Main success scenario:

Student clicks on student login tab and then gets redirected to Gmail page.

- Student enters student mail id and password
- Student submits and then redirected to the app again.

#### **Extensions:**

Id or password incorrect. Handled by Gmail.

#### **Post-conditions:**

- I first time login, then student is required to complete their profile, which includes uploading CV, uploading Aspiration form, and filling minimum 1 to maximum 5 preferences. All fields are compulsory to be filled.
- Student can now access all features of the app provided for students.

# Use Case 5:

**Name:** Upload Documents required by admin (if any):

**Summary**: Students upload missing documents upon being notified of the same by the admin.

**Actors**: NIIT Students

# **Pre - Conditions:**

Admin clicks on the notification tab in the student overview profile to notify the student to upload the missing documents.

#### **Main Success scenario:**

- Student clicks on the upload button to upload the required documents.
- Students chooses a file in pdf format from the local files present on the phone.
- Student uploads the chosen file through the app.
- The uploaded file is successfully acknowledged by the administrator.

#### **Extension:**

- Student fails to upload the file due to loss of internet connectivity. An error message is thrown which indicates the same.
- The administrator finds the uploaded file to be not correct. The student is notifies of the same once again.

#### Post condition:

Admin acknowledges the successful upload of the required documents.

# **Use Case 6:**

**Name:** Follow Jobs Applied for

**Summary:** Student is able to check the status of the job application, check the selections status of different rounds and check the final status whether the job has been approved or rejected.

**Actors:** NIIT Students

# **Pre - Conditions:**

• Admin has updated the status of the job application if there has been any update and student after a successful login has clicked on the Follow Jobs applied for tab.

# **Main Success Scenario:**

- Student clicks on the Follow Jobs Applied for tab.
- Student checks the status of the job application.

#### **Post condition:**

Student is able to know the status of the job application.

# Use Case 7:

Name: View / Update Profile

**Summary**: Student is able to view or update the uploaded profile.

**Actors:** NIIT Students

Pre - Conditions: .

Student clicks on the View / Update profile tab.

#### **Main Success Scenario:**

- Student clicks on the View / Update profile tab.
- Student is able to view the uploaded profile.
- If the student wants to update the profile he / she will click on the Update profile button or if there is no update to be made then student can return back to the main home screen.
- Student fills in the updated profile details.
- Student saves the updated profile and views the same for clarification.
- Student returns back to the home screen

# **Post condition:**

Student has successfully viewed the profile or updated the same based on his choice.

# Use Case 8:

Name: View FAQ

**Summary:** Student can view the Frequently Asked Questions (FAQ)

**Actors:** NIIT Students

#### **Pre-conditions:**

Internet connectivity.

#### **Main success scenario:**

- Student click on FAQ tab.
- Student browses to the desired question from list of FAQ'
- Student gets the answer of the question they wish to look an answer for.

#### **Extensions:**

To get a result, there must be either the same or the related question for the user query.

#### **Post-condition:**

Students will be up to date with queries.

#### Use Case 9:

Name: View Contact Page

**Summary:** Student can view the contact details of Placement Cell of NIIT University.

**Actors:** NIIT Students

# **Pre-conditions:**

Internet connectivity.

#### Main success scenario:

- Student click on 'View Contacts'.
- Student browses through the Contact details of the desired person until found.
- Student gets the contact details of the desired person.

#### **Extensions:**

Student is able to get the contact information of a person only if it has been provided by the admin.

# **Post-condition:**

Student gets the desired contact detail.

#### **Use Case 10:**

Name: Insert Company

**Summary:** Admin can add a new company profile.

Actors: Admin

# **Pre-conditions:**

• Internet connectivity.

• The company to be added must have Industry Collaboration with NIIT University.

## Main success scenario:

Admin clicks on 'Insert Company' tab.

- Admin fills in the required details of the new company to be added.
- Admin saves the details and the new company gets added.

# **Extensions:**

**NIL** 

#### **Post-condition:**

New company gets added by the admin.

# Use Case 11:

Name: Approve Students Job Profile

**Summary:** Admin can approve the details filled in by the student.

**Actors:** Admin

#### **Pre-conditions:**

- Internet connectivity.
- Student must have filled the necessary details.

#### **Main success scenario:**

- Admin views the student's profile.
- Admin cross verifies the students details against university's record.

• If Admin does not find any data discrepancy, he approves the profile.

#### **Extensions:**

**NIL** 

# **Post-condition:**

Student's information/Profile gets approved by the admin and therefore, Student can apply for the desired internships.

# Use Case 12:

Name: Updates about page

**Summary:** Admin can make changes to the 'About us' page.

**Actors:** Admin

#### **Pre-conditions:**

Internet connectivity.

• There must be a change in existing value or a new value should be present.

#### Main success scenario:

• Admin clicks on update page in 'About Us' section.

Admin replaces/add the old/new values in the desired fields respectively.

Admin then saves the values.

#### **Extensions:**

NIL

# **Post-condition:**

About Us' Section gets updated by the admin.

# Use Case 13:

Name: Post FAQ

Summary: Student can post FAQ regarding any queries related

**Actors**: NIIT Students

**Pre-Condition**: There must be something to ask about.

### **Main Success Scenario:**

· Student must click on the FAQ section

• Then they must post a FAQ if they have any

• The FAQ will then be answered by the placement cell members

• All the student will be able to view the FAQ posted by another student

#### **Extension:**

The FAQ is already posted by some other student or

FAQ section couldn't download due to weak internet connectivity

• FAQ not yet being answered by the higher authority

#### **Post Condition:**

Students can now view the answers of the queries posted by them.

# Use Case 14:

Name: View/Change Preferences

**Summary**: Student can change Preferences of the job according to their requirements if they are willing to and can view them later.

**Actors:** NIIT Student

# **Pre-Condition:**

Initially student must give minimum 2 and maximum 5 Preferences while completing their profile

#### **Main Success Scenario:**

• Student must click on the Preferences section in order to change or view their preferences

• Student can then change their preferences by selecting required preferences among the given option.

• Student can also view the Preferences chosen by them.

# **Extension:**

- Student can choose at max five Preferences; more than five Preferences are not allowed to be chosen
- Student must choose minimum of two Preferences of their choice, less than that is not allowed

# **Post Condition:**

Students can now view the Preferences chosen by them and can get the notification of jobs according to their preferences.

# Use Case 15:

Name: Apply and View job listings

**Summary**: Students can view the job listing and can apply for the job of their choice

**Actors**: NIIT Student

#### **Pre-Condition:**

Student must give the Preferences of the job of their own choice in order to view the job listing

# **Main Success Scenario:**

- Student must click on the Job Listing in order to view the Job listing
- Student then will be able to view the job listing and the complete information regarding the recruitment process
- Student can click on the respective choices and can click on the apply icon if they willing to apply for the current job

#### **Extension:**

Complete information download about the job tends to go slow if the internet connectivity is weak

#### **Post Condition:**

Students can now view the other information about the job for which they have applied for.

#### Use Case 16:

Name: View Student's Profile

**Summary**: Admin can view the profile of any student he wishes to and check if he has uploaded all the necessary documents or submitted a particular document.

Actors: Admin i.e. NIIT University Placement Cell

**Preconditions**: Admin must be successfully logged in and he should have notified the students to submit a particular document earlier.

#### Main success scenarios:

- Admin clicks on View Student's profile tab.
- Admin chooses for the student he wishes to view profile of and clicks on View Profile Tab.
- Admin views the student's profile

#### **Extensions:**

If a student has not uploaded any document, a notification will be shown and he can then once again send a reminder to the student

#### **Post Condition:**

Admin has now successfully viewed the student's profile.

# Use Case 17:

Name: View/Answer FAQ

**Summary:** Admin can view the frequently asked questions posted by the NIIT University Student's on the FAQ page and answer them.

**Actors:** Admin i.e. NIIT University Placement Cell

#### **Preconditions:**

- Admin must be successfully logged in and students should have posted their queries on the page.
- The questions must also be up voted/liked by other students who have the same query.
- FAQ page must have questions arranged in the decreasing order of up votes.

#### Main success scenarios:

- Admin clicks on View/Answer FAQ tab.
- Admin views the questions and can answer a question by clicking on the answer tab below each question

#### **Extensions:**

If no questions are posted in the FAQ page or no question is left unanswered, an appropriate notification will be shown.

**Post Condition:** Admin has now successfully viewed/answered FAQ questions.

# Use case 18:

Name: Upload Sample Papers

**Summary:** Admin can upload sample papers of questions similar to which students can expect in the interviews

Actors: Admin i.e. NIIT University Placement Cell

**Preconditions:** Admin must be successfully logged in.

#### Main success scenarios:

- Admin clicks on Upload Sample Papers tab.
- Admin chooses for the file(s) he wishes to upload from his computer and then clicks on UPLOAD tab.

# **Extension:**

Error in uploading. Shows error dialog box. Occurs in case of weak Internet connectivity.

#### **Post Condition:**

Admin has now successfully uploaded sample papers.

# 3.2 Non-Functional Requirements:

• Can apply to any internship only after your profile being verified by the admin.

- Training data/Sample papers can be added only in pdf format by the admin.
- Restriction in login: student login with university mail id and admin login with pre-registered mail ids only.
- Admin should be able to push notification to be shown on student's interface, about any specific requirements/demand from any specific student.

# 3.3 Hardware Requirements:

Should run on android device. Requires minimum 2gb ram for smooth functionality of the app.

# 3.4 Software Requirements:

Minimum SDK version: Android 4.0.3 (Ice Cream Sandwich).

# 3.5 Design Constraints:

- Security: The files in which the information regarding securities and portfolios should be secured against
  malicious deformations.
- **Fault Tolerance:** Data should not become corrupted in case of system crash or power failure.