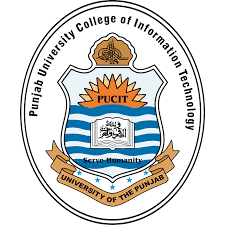
**Faculty COLLEGE OF**

**INFORMATION AND TECHNOLOGY**



**Software Engineering**

**Project**

**TOPIC: “Recommendation Of Graduation”**

**Submitted To**: Dr. Anzar Ahmed

**Submitted By:**

BCSF20A018-IMRAN KHAN

BCSF20A042-MEMOONA ABDUL HAYEE

BCSF20A046-FATIMA ANSARI

BCSF19A026-ABDUL AZIZ

**Session:** 2020-2024

**Date**: September 28, 2022

**Recommendation of Graduation**

Table of ContentsProject Proposal Document..........................................................................................................3  
Team Introduction .......................................................................................................................3  
Feature List: .................................................................................................................................4  
Use Case Documentation: ...........................................................................................................5  
Domain Model Analysis ...............................................................................................................11  
Domain Model Diagram: ..............................................................................................................12

1. **Project Proposal Document**

**Recommendation of Graduation**

We are going to develop a desktop application for students of intermediate that they will easily choose best field for graduation. As we know that most of the student face various type of difficulties like, about scope of field, jobs opportunities, interest of study and finding the best university and field for the higher studies.

So, we are trying to help them by getting some data from them about their previous study, interest, financial status and about getting their dream job. After that we analyzing under certain criteria and will recommend them about the perfect field. Moreover, the app will help them finding the admission procedure and merit criteria of the recommended field and university.

**Problem:**

As most of the student after passing their intermediate examination worries about the

Graduation career and subject selection for graduation. They fail to select the right subject as well as institute for their graduation, they try to get guidance from senior for this purpose they use social media and other approaches to decide the field and find out the answer for the following questions.

* What to do?
* Which field is suitable to me?
* Can I afford the expenses for graduation?
* How much the difficulty level for this field?
* Can I complete it in 4 years?
* What is the scope of this field?
* Can I get the job easily after graduation?
* Can I get admission in a better institute?
* Most of them confuse about the rank of the university for their interested field?
* Can I achieve the goal of my life doing this?

**Solution:**

We are trying to resolved this problem and to guide the student in an appropriate way as well as to satisfy them by answering their questions after analyzing their previous academic record. We first taking all the information from the student and then suggest him/her a list of departments suitable for his/her graduation accordingly.

This list is based on him/her interest, marks in interested subject, marks in other subjects, family background and as well as their financial conditions.

We guide him/her in a proper way and he/she can enable to select different department from the list and then get information about such department i.e., is there any nearest university offer this program, what is the scope of the university and how can he apply and furthermore the fee structure of the selected university/institute.

1. **Team Introduction:**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Team Introduction Matrix** | | | | |
| **#** | **Name** | **Roll Number** | **Role** | **Introduction** |
| 1 | Imran Khan | BCSF20A018 | Project Manager | He likes to work in group and best communication skills. |
| 2 | Abdul Aziz | BCSF19A026 | Analyst | Mr. Abdul Aziz likes to work with creating and managing tracks of documents and creating use case as well as testing and analyzing the use case on proper way. |
| 3 | Memoona Abdul Hayee | BCSF20A042 | Analyst | She likes to work with creating and managing tracks of documents |
| 4 | Fatima Ansari | BCSF20A046 | Designer | She likes to design and model the diagram well and in organized way to maintain the relationship of entities with each other. |

1. **Feature List:**

|  |  |  |
| --- | --- | --- |
| **Feature List for Modules** | | |
| **#** | **Requirements** | **Feature** |
| 1 | To keep the user personal information confidential and maintain this for further use. | Login/sign up page |
| 2 | To recommend the appropriate department/career based on that academic record and maintain that information for further use. | Adding/modifying the academic record. |
| 3 | Based on this feature we can analyze the nearest institute, suitable to his/her area of interest. | Aim and area of interest/family background |
| 4 | Based on this feature we analyze the institute and easily figure out the list of institutes that fulfill the required condition. | Selection of field/department |
| 5 | This feature is use by user, in which he/she can see and select the field from the recommended department/field | Show list of suggested department/field of study |
| 6 | This feature is use to see the list of recommended institute/university and select the institute to see the further details. | Show list of suggested Institute |

1. **Use Case Documentation:**

**UC ID:** UC\_M1\_011

**UC Tittle:** Signup/login

**Primary Actor:** User\system

**Pre-Conditions:** User must have academic career of intermediate/matric.

**Post Conditions:** User login to the app successfully.

**UC Interaction:**

**Main flow:**

1. User open the application
2. Show welcome page

2.1 Fail to show

2.1.1. Reload or check your internet connection

1. Show Navigation bar (Home, About, Login)
2. Find your career from here(click)
3. System asks for the login from the user or sign up
   1. System fails to show the required menu
      1. Refresh the page or check your Internet connection
4. User login to the application
   1. User name and password not found
      1. Please sign up first if not.
   2. Can’t login user name or password incorrect
      1. Please provide the valid username and password OR sign up if not yet.
5. User click the signup button
6. User provide the personal information name, password email etc.

8.1 providing incorrect password length

8.1.1 Your password must be of 8 lengths

8.1.2 Re-enter the password

8.2 username or password already in use

8.2.1 Password should be of 8 characters

8.2.2 Re-enter the password

8.3 passwords can’t match

8.3.1 Please enter the password and confirmed password same

8.3.2 Re-enter the password

9. User enter the email

9.1 password already in use

9.1.1 Please provide another password or go for login if already have sign up.

9.1.2 Refresh the page to proceed.

7. User sign up successfully

8. User sign in the app by providing user name and password

8.1 User name or password is not correct

8.1.1 Please provide the valid username and password

8.1.2 Press forget password

9. User sign in to the app successfully.

**UC ID:** UC\_M1\_012

**UC Tittle:** Academic profile

**Primary Actor:** User\system

**Pre-Conditions:** User must log in to the app successfully.

**Post Conditions:** System add/remove/modify the academic record.

**UC Interaction:**

**Main flow:**

1. Do You want to save your login information Yes/No

2. User provide his\her all previous academic information

2.1 Incomplete information is provided.

2.1.1 Point out the unfilled\partially filled blocks and user reenter the unfilled information.

2.2 Application is unable to submit the academic record.

2.2.1 Refresh the page and try again.

**UC ID:** UC\_M1\_013

**UC Tittle:** Aim and interest

**Primary Actor:** User\system

**Pre-Conditions:** User must have provided the academic record.

**Post Conditions:** System show the list of recommended departments.

**UC Interaction:**

**Main flow:**

1. Ask for the aim\interest and family background from the user.

1.1 User enter invalid information.

1.1.1 prompt for correct information on each field.

1.2 User skip any information.

1.2.1 prompt for filling the form each field one by one.

1.3 Some technical issue occurs.

1.3.1 Refresh the page save and exit.

**UC ID:** UC\_M1\_014

**UC Tittle:** Selection of department

**Primary Actor:** User\system

**Pre-Conditions:** User must have academic career of intermediate/matric.

**Post Conditions:** User login to the app successfully.

**UC Interaction:**

**Main flow:**

1. User provided and submitted all the input information.

2. Displaying the list of the recommended field/department on screen.

2.1 Fail to display the list.

2.1.1 Refresh the page to display or check your internet connection.

3. Asking for selection of field/department.

3.1 Incorrect selection of field

3.1.1 Please select a valid field.

4. Ask if he/she can study in out of city(yes/no)

4.1. not selected any option

4.1.1. select anyone for further process

4.2 Not select able or not showing

4.2.1 Refresh the page

5. Ask to enter their location(district)

5.1. Invalid location

5.1.1. Enter valid location

5.2 leaving blank

5.2.1. enter location

**UC ID:** UC\_M1\_015

**UC Tittle:** Selection of institute

**Primary Actor:** system/user

**Pre-Conditions:** User must have selected the department.

**Post Conditions:** System show the detail of the selected university.

**UC Interaction:**

**Main flow:**

1. Displaying the list of recommended university/institute.

1.1 Fail to display the list.

1.1.1 Refresh the page to display or check your internet connection.

2. Displaying list of universities according to rank (within the budget)

3. Displaying list of institutes according to rank (without the budget)

3.1. not displaying

3.1.1. refresh the page

4. Select University to see further detail.

4.1 Invalid selection.

4.1.1 Please select a valid choice.

5. Displaying the Detail of the university.

6. Asking for exit or go to the main menu.

6.1 Invalid selection.

6.1.1 please select a valid option.

7. Repeat if back to main menu/Asking for feedback if exit.

8. Displaying Good Bye message.

**5.Domain Model Analysis:**

|  |  |
| --- | --- |
| **Entity** | **Relationship** |
| Student | Inheritance relationship with personal information, academic information and interest/aim and family background |
| Student Register | Containment relationship (composition) with record. |
| Department Register | Containment relationship (composition) with list of recommended departments. |
| University Register | Containment relationship with list of recommended universities |
| Personal Information | Inherited from student class |
| Academic Information | Inherited from student class |
| Interest\Aims and Family Background | Inherited from student class |
| List of recommended Departments | After analyzing the student information display the list of recommend departments. |
| List of recommended Universities | Displaying the list of university based on student selection of department. |
| Record | Add/search the student record in the student register |
| Validation | Include/modify the student class (Academic Information, Personal Information, Interest\Aims and Family Background) |
| Selection of university | Student select from the recommended list of universities |
| Selection of department | Student select from the recommended list of departments |
| Detail | Contain the detail of the university |

1. **Domain Model Diagram:**

App

Repeat

Details

Interest Aim/Family background

University Register

Department Register

Academic Information

Personal Information

List of Recommended Universities

List of Recommended Departments

Student

Select University

Validation

Student Records Register

Record