Project Name: Admissions Update/Information System

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Task - I

Identify functional and non-functional requirements of your system.

Functional Requirements:

- Open Admissions Panel/list
- Filter for searching Open Admissions [based on region, programme/dept etc.]
- Details of an Open Admission
- Universities list [for different region, course/dept]
- Cutting-Merit of concerned department of the university
- Merit-calculator (based on provided user informations) / Chance Calculator
- Cost of Degree calculator
- Control Panel Login
- Add new university information
- Add new admission opening information
- Add cut-off merit details of a university
- comments on admissions information by users

Non-Functional Requirements:

- Easily updatable
- Modifiable
- Usability
- Reliability

Task - II

Write a specification of each requirement. The specification template must include the following: introduction, rationale, pre-condition, inputs, description, outputs, post-condition

Requirement #01

Introduction:

Filter for searching Open Admissions [based on region, programme/dept etc.]

Rationale:

There should be an easy way to get the list of universities with open admissions on one-click so that students can get the information on a single click at the right time with minimal effort

Pre-condition:

N/A

Inputs:

Degree program, Region(country, city), Specific factors(Scholarships, recognition, ranking etc.)

Description:

A user can give the degree program, region choice to get the details of universities with open admissions based on provided criteria, This will boost student's choice of university with minimal effort and much more assistance.

Outputs:

Filtered based information about the universities or list of universities with open admission

Post-condition:

N/A

Requirement #02

Introduction:

Details for open admission of a university

Rationale:

Many student fail to apply for admission because they do not know about the admissions open/close date of universities.

Pre-condition:

N/A

Inputs:

University name

Description:

A user can give the degree program, region details or university name to get the details of universities with open admissions based on provided criteria, and look at the open/close date of application, application process, offered programs of open admission of a specific university.

Outputs:

A page with details of admission information about [input] university

Post-condition:

N/A

Requirement #03

Introduction:

Open Admissions Panel/list

Rationale:

There should be a list of universities with open admissions so that students can get the information about them before the due date is over.

Pre-condition:

N/A

Inputs:

Degree program, Region(country, city), Specific factors(Scholarships, recognition, ranking etc.)

Description:

There will be a list of universities with open admissions with last date to apply in ascending order.

Outputs:

Filter based information about the universities or list of universities with open admission.

Post-condition:

N/A

Requirement #04

Introduction:

Universities list [for different region, course/dept]

Rationale:

In many cases the do not know what are the universities are present in their city. Also they don't know which universities are offering what kind of study programs.

Pre-condition:

N/A

Inputs:

Degree program, Region(country, city), Specific factors(Scholarships, recognition, ranking etc.)

Description:

Users should be able to get the detailed information of universities around or based on their choice of field/area-of-studies. The list of universities based on the region selected in search filter with choice of region and degree program should appear.

Outputs:

Filtered based information about the universities or list of universities with open admission.

Post-condition:

N/A

Requirement #05

Introduction:

Cutting-Merit of concerned department of the university

Rationale:

Previous merit-cut-off is very important for students, they can decide to apply or not to apply for a certain program/university based on their aggregate.

Pre-condition:

N/A

Inputs:

University name

Description:

The history of cutting merits for each department will be shown based on user's choice of university.

Outputs:

List of cut-offs based on [input] for all study programs of that university

Post-condition:

N/A

Requirement #06

Introduction:

Control Panel Login

Rationale:

Authenticity and security of this system is very important and thus only trusted people should be able to add/update data in this system

Pre-condition:

Login validation

Inputs:

Email address, password

Description:

Only the managerial personales should be able to make changes or add data to this system or view the existing data statistics in systems, So that the information provided should be accurate. There should be a login checkpoint to the control of the system to make changes in the system because the system should give the correct information to the end users.

Outputs:

A new control panel page

Post-condition:

N/A

Requirement #07

Introduction:

Add new university information

Rationale:

The system should be able to add new information, because in real life situations it's not possible to feed all data at once and also always new institutes came into existence all the time.

Pre-condition:

The user should be logged into control panel

Inputs:

University name, address (city, country), study programs, official website, admissions office contact details etc.

Description:

Only authenticated users should be able to add new university listing/information to the system.

Outputs:

A congratulation message

Post-condition:

The university information gets added to the system

Requirement #08

Introduction:

Add new admission opening information

Rationale:

The system should be able to add new information, because in real life situations it's not possible to feed all data at once and also always after one or half year the universities open their admissions.

Pre-condition:

The user should be logged into control panel

Inputs:

University name, Start date, Last date, etc.

Description:

The authenticated users should be able to add new admission opening listing/information to the system.

Outputs:

A congratulation message

Post-condition:

The admission opening information gets added to the system

Requirement #09

Introduction:

Add merit cutoffs information

Rationale:

The system should be able to add new information, because in real life situation it's not possible to feed all data at once and also always after one or half year the universities open their admissions and the new merit cutoffs are reported.

Pre-condition:

The user should be logged into control panel

Inputs:

University name, programs and their respective cut-offs

Description:

The authenticated users should be able to add new cuttoff merits information to the system.

Outputs:

A congratulation message

Post-condition:

The merit cutoffs information gets added to the system

Requirement #10

Introduction:

The ability to access information about universities admissions, their criteria, their merits, etc helps students to know about universities rather than few and also helps them in taking decision about their future.

Rationale:

Many students have reported that they only applied to few universities many because they only knew about few, they weren't aware about the fee structure or they didn't knew whether the university was recognized by HEC,PEC,etc.

Pre-condition:

Inputs:

University name, Student's own aggregate, Region, Specific factors(Scholarships, recognition, ranking etc.)

Description:

University will provide the information regarding its departments, fee structure, merits, previous closing merits, HEC/PEC etc. recognition, Admission Date, Scholarship criteria. A student can view this information of any university or can filter universities related to the information.

Outputs:

Filtered based information about the universities or list of universities with open admission.

Post-condition:

N/A

Requirement #11

Introduction:

A merit calculator allows us to calculate the merit for a university from the information provided by the student.

Rationale:

Each university generally has its own unique formula, used to calculate a student's merit. For a student to determine whether they'll be able to get an admission in the university or if they are eligible for a scholarship, they will need to calculate their merit.

Input:

For input, a student will enter his/her academic scores as required by the university.

Description:

The merit is calculated by a predefined formula that will be available for each university. A student selects the university and degree he/she wants to calculate the merit for and enters the required inputs for the calculation.

Output:

The merit of the student with any extra information that might be required (eg. last year's cut off merit)

Post-condition:

There is no change in the database.

Task - III

Identify the metrics that you will use to measure the non-functional requirements.

Easily Updatable:

Updating information should be easy. People should be able to add and update information simply by following a set of instructions.

Usability:

Our goal is to create a system that requires no specific training to use and only requires basic knowledge about computers and cell phones.

Reliability:

We will judge the reliability of our system by the accuracy of the merit calculated or predicted.

Modifiable:

The Database design should be such that it can work optimally even if new functionalities are introduced in future.

Task - IV

Include an introduction section. This should describe the need for the system. It should briefly describe the system's functions and explain how it will work with other systems.

After intermediate and A-levels, students start thinking about the universities for their undergraduate, many of whom know only about a few famous and recognized universities or do not know which department they have and other such information. Due to difficulty in knowing these details, some students miss the opportunity to get an admission in good a university.

The system provides a solid platform for students to have the latest information regarding all the universities and their admission process.