**Software Requirement Engineering**

***CLO: 02 <Applying>***

**Assignment:** 02

**Section:** A

**Group Members:**

|  |  |
| --- | --- |
| Name | Reg ID |
| Aoun Haider | FA21-BSE-133 |
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**Qno: 01 <Requirement Errors>**

|  |  |
| --- | --- |
| **FR02-01** | The user shall be able to login into the system with a registered email address and password. Amalgamation |
| **FR-02-02** | The system shall authenticate the email and password. Amalgamation |
| **FR-03-01** | The system shall notify alumni about the upcoming events and gatherings of the university with location, date, and time. Amalgamation |
| **FR-03-02** | The system shall notify alumni about the location, date and other details of the upcoming events. Amalgamation |
| **FR-04-01** | The system shall enable alumni to access all kinds of available books and articles from e-library. Amalgamation |
| **FR-04-03** | Alumni shall be able to download e-books and digital resources for offline access. Ambiguity |
| **FR-05-01** | The system shall allow the alumni to post job opportunities and mentorship  for fellow alumni or students. Amalgamation |
| **FR-09-01** | Alumni shall subscribe to newsletters and updates Amalgamation |
| **FR-12-01** | Alumni shall contribute to fundraising campaigns for the university Amalgamation |
| **NFR-03-02** | Data encryption to  Incomplete |
| **NFR-04-01** | System must be available and accessible to user for 23.8 hours. Amalgamation |
| **NFR-07-01** | The system shall be easy to maintain and debug. Amalgamation |
| **NFR-08-01** | The system should regularly back up data and have a robust data recovery plan in place to restore the portal in case of data loss or system failure. Amalgamation |
| **NFR-09-01** | System shall handle increasing numbers of users.  Non-verifiable |

**Qno: 02 <Context Level DFD>**

A diagram of an alumni association

Description automatically generated

**Qno:03 <Use Case Identifiers>**

***Actors:***

* Alumni
* Admin

***Alumnis’ Use Case:***

* Sign-up
* Login
* View up-coming events
* Update profile
* Apply for card
* Place complaint
* Upload job news
* Change theme
* Participate in discussion form
* Logout

***Admins’ Use Case:***

* Login
* Manage user account
* Notify upcoming events
* Review complaint
* Remove complaint
* Manage fundraising compaign
* Upload job news
* Update portal
* Logout

**A diagram of a program

Description automatically generatedQno:04 <Use Case Diagram>**

**Qno: 05 <Use Case Description>**

**Name:** Apply for card

**Summary:** User requests an alumni ID card through application process

**Actor(s):** Alumni

**Dependency:** None

**Pre-condition(s):**

* Portal is idle
* Portal shows a greeting message

**Normal Flow of events:**

* The user navigates to *Apply for card* section within the portal
* The system presents an online application form for the alumnis’ ID card
* The user fills in the required details such as personal information, contact details and other information
* Upon completion, the user submits the application form
* The system validate the submitted information for completeness and correctness
* The user recieves an confirmation email for further information

**Alternatives:**

* If there are incomping or incorrect details in the application form, the system notifies the user and highlight the specific fields which need correction
* The user revises the form accordingly and resubmits the application
* If internet connection cut-off during form filling, system will concurrently store the information and later restore it.

**Post Condition:**

* User successfully applies for alumni card

**Qno: 06 <Decision table>:**

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
|  | 1 | 2 | 3 | 4 | 5 |
| Alumni Type (Regular, VIP) | R | R | VIP | VIP | VIP |
| Profile Status (active, inactive) | A | IA | A | IA | A |
| Event participation (participating, not participating) | P | NP | P | P | NP |
| Membership (paid, not paid) | P | P | NP | P | NP |
|  |  |  |  |  |  |
| Access Resources | Y | N | Y | N | Y |
| Update profile | Y | N | Y | N | Y |
| Send newsletter | Y | N | Y | N | Y |
| Provide event updates | Y | N | Y | N | Y |
| View job postings | Y | N | Y | N | Y |
| Connect with other alumni | Y | N | N | N | N |
| Donate | Y | Y | Y | Y | Y |