**Section 1 – Elevator Pitch:**

The proposed application, which has been named the eExperience app, will serve as a companion for incoming SIUE freshmen during the first few months of enrollment. While at the Springboard program held at the end of summer, new students will be introduced to the mobile application and encouraged to download it to their personal devices (phones, tablets) to familiarize themselves with and utilize the resources it provides. At the beginning of the fall semester, when the incoming students will be beginning classes, the eExperience app aims to be a primary mode of communication between the university and the students, making announcements for events around campus and integrating official SIUE social media such as Twitter. The main purpose of the app is to encourage students to become engaged in social groups and activities around campus during their first few weeks of attending class.

**Section 2 – Functional Requirements:**

**2.1 – User Classes:**

* Incoming SIUE freshmen – Primary class – Class A – Over 95% of users
* SIUE Student Leaders – Secondary class – Class B – Less than 2.5%
* Parents of Incoming SIUE Freshmen – Secondary class – Class C – Less than 2.5%

**2.2 – User Tasks:**

**Incoming SIUE freshmen (Class A)**:

* **Task A1:** A person in user class A can view a campus events schedule in order to learn what events are happening around campus and prepare for the Cougar Welcome event.
* **Task A2:** A person in user class A can view maps and images of locations around campus in order to familiarize themselves with the campus.
* **Task A3:** A person in user class A can view a list of Frequently Asked Questions relating to the new student processes/programs in order to address some potential questions the user may have.
* **Task A4:** A person in user class A can view a second list of Frequently Asked Questions that are geared towards parents/guardians of the students.
* **Task A5:** A person in user class A can view and update a checklist of tasks in order to complete any and all required new student process-related tasks.
* **Task A6:** A person in user class A can view recent Twitter messages from the official SIUE Twitter feed in order to receive news regarding campus events/happenings.
* **Task A7:** A person in user class A can receive general messages relating to New Student Orientation/Springboard in order to provide guidance to the user.
* **Task A8:** A person in user class A can take and submit a short assessment relating to a campus event that they have attended.
* **Task A9:** A person in user class A can view a list of sites, links and apps recommended by SIUE for student use, such as the SIUE website, the SIUE mobile app, and possibly others.

**Section 2.2 – User Tasks (continued):**

**SIUE Student Leaders (Class B):**

* **Task B1:** A person in user class B can view and update a campus events schedule in order to communicate changes with students regarding event times and locations.
* **Task B2:** A person in user class B can send general messages to students relating to New Student Orientation/Springboard in order to provide guidance to the students.

**Parents of Incoming SIUE Freshmen (Class C):**

* **Task C1:** A person in user class A can view a campus events schedule in order to learn what events are happening around campus and prepare for the Cougar Welcome event.
* **Task C2:** A person in user class A can view maps and images of locations around campus in order to familiarize themselves with the campus.
* **Task C3:** A person in user class C can view a list of Frequently Asked Questions relating to the new student processes/programs in order to address some potential questions the user may have.
* **Task C4:** A person in user class C can view a second list of Frequently Asked Questions that are geared towards parents/guardians of the students.

**2.3 – Functional Groups:**

|  |  |  |  |
| --- | --- | --- | --- |
| **Functional Group #** | **Group Identifier** | **Tasks In Group** | **Description** |
| 1 | Static Info | A2,A3,A4,A9,C2,C3,C4 | Tasks involving relatively static information |
| 2 | Dynamic Info | A1,A6,A7,C1 | Tasks involving information that can change |
| 3 | Input-Enabled | A5,A8 | Tasks involving user interaction |
| 4 | Privilege | B1,B2 | Tasks involving the modification of information |

**2.4.1 – Static Info Test Plan:**

The tasks contained within this functional group revolve around viewing information that does not change often. Therefore, the majority of the testing for this group will focus on ensuring that each page or section of information is accessible and the layout of each section is correct. We will most likely be utilizing a Model-View-Controller framework, so most of the testing/debugging will revolve around changing the Views of each specific page/section.

**2.4.2 – Dynamic Info Test Plan:**

The tasks contained within this functional group revolve around viewing information that is subject to change. This group does share some similarity with the Static Info group, but as the content is subject to change, a more flexible approach must be taken to ensure that the layout of sections will be adaptable with future content updates. Of note here is the inclusion of the Inbox functionality. Initially it is unclear if messages passed through the eExperience app will be unique to the app, or if they will utilize student email.

**2.4.2 – Dynamic Info Test Plan (continued):**

If student email is utilized, this feature may not be implemented for fear of “reinventing the wheel” in terms of official SIUE correspondence. However, if the messaging system is unique to the application, we will have to explore the capabilities of the technology and how we will implement the “proprietary” message system. One possible idea is to generalize the messages that are sent, which will be “seen” as messages, but in essence will simply be general reminders for all students rather than having the possibility of individually addressed messages. Unfortunately, with a “generalized” messaging system, the effectiveness and usefulness is significantly decreased.

**2.4.3 – Input-Enabled Test Plan:**

The tasks contained within this functional group revolve around the interactive portions of the eExperience application for the students. For the student checklist task, our initial plan is to store a local file that details which items in the checklist have been checked by the user. Our testing will consist of ensuring proper storage of that local file and successfully reading from it to populate the checklist correctly. As for the post-event assessments, we will need to find a way to submit the survey to a server that stores the responses. Most likely we will be in contact with SIUE ITS to utilize a machine to host a database for these responses. This is something new for all of us, so as we learn more about it, our testing approach may evolve. For now, we are concerned with establishing a connection to the server and successfully sending and storing the assessment responses.

**2.4.4 – Privilege Test Plan:**

The tasks contained within this functional group consist of the operations that the Student Leaders of the New Student Orientation groups may need to perform. The first task, updating the campus events schedule, will most likely consist of storing the events in a database on our server, and updating the records in the DB table. An update to the database will be reflected when the app is refreshed. Testing will consist of ensuring that the database records are successfully updating, and also ensuring that the changes are reflected in the student’s schedule portion of the app. The second task, sending general messages to users, may or may not be implemented, but if it is, it looks like the messages will simply be general reminders to students about events, tasks, etc. We will be discussing the necessity of the Inbox/Messaging feature during our next client meeting because we do not want to “invent” another University-to-Student communication mode when the SIUE mail is the standard, and usage and monitoring of student email should be encouraged. Testing for this task would consist of possibly pushing the new message to a separate database table, which would then appear in the refreshed application for the users, similar to the testing for the event schedule updating.

**2.5 – Estimate Effort:**

|  |  |  |  |
| --- | --- | --- | --- |
| **Group #** | **Group Identifier** | **Tasks in Group** | **Estimated Person-Hours** |
| 1 | Static Info | A2,A3,A4,A9,C2,C3,C4 | 40 |
| 2 | Dynamic Info | A1,A6,A7,C1 | 55 |
| 3 | Input-Enabled | A5, A8 | 45 |
| 4 | Privilege | B1, B2 | 50 |
| **Total Estimated Person-Hours for Functional Tasks:** | | | 190 |
| **Estimated Person-Hours per Team Member for Functional Tasks:** | | | 64 |
| **Estimated Person-Hours per Team Member Per Week:** | | | 8 |

**Section 3 – Non-Functional Requirements**

**3.1 – Security/Data-Privacy Issues:**

Prior to speaking to SIUE ITS regarding possible security issues, we were not concerned with security because we do not intend to have students sign into the app. However, after some discussion, it appears that we will need to allow Student Leaders and other administrators (such as the client) to have privileged access. That is something we will need to discuss with ITS. As of now, we do not have an estimate for work or a plan to implement the security. The other non-functional requirement the client has expressed desire for is the utilization of push notifications for the application. This seems to be a platform-specific feature that we will need to learn how to implement.

**3.2 – Data Longevity Issues:**

We will be contacting ITS in order to reserve server space to store our data. We will need space to store the campus events schedule, possibly the Inbox messages, and lastly, the list of authorized accounts to have privileged access to the application. Also being discussed is the implementation of a website which will allow the client or other administrators to update the information/content on the application through a traditional desk/laptop web interface.

**Section 4 – Non-Executing Products**

**4.1 – Identify Non-Executing Products:**

As of now, we do not see the need for any non-executing products, such as external documentation. However, as the project progresses, we may find need for something.

**4.2 – Estimate Effort:**

Since we currently have no non-executing products identified for this project, there is no additional effort to estimate.