Software Requirements Specification

Introduction

1.1 Purpose

The software presented within the following document involves an FGCU Complete emailing tool. The FGCU Complete emailing software is designed to send all the information about FGCU Complete to the right students (those who meet the intended constraints of the program). This tool has the purpose of increasing the participation through FGCU Complete to help more students get their degrees on time. The software achieves this by allowing the user(instructor of FGCU) to login to the system and provide different emails to students. Every student in the FGCU Database would be accessible for this software. The document "Software Requirements Specifications for FGCU Complete" is intended for developers, product management, and stakeholders. The purpose of the software being created is to provide help to those in faculty specifically for those working on FGCU Complete within the advising department. The organization's strategic goals are to provide "returning students with the opportunity to accelerate completion of their degree" - Stakeholder.

1.2 Scope

Product Name

The product name is "FGCU Complete Emailing"

Overview

The software product should be able to take a database consisting of student GPAs and credit hours, select those students and then email specifically to those students.

Goals

The application of the specific software is that we will take this software and use it to collect information regarding the student emails which qualify for the program. After this information is selected the email formulated by faculty members will be emailed to these students. These students specifically qualify for eligibility in the program. The overall result that we want is to have more people inside the program. The software using Python, and SQL potentially or Excel will be used to automate the emailing process. After this process is automated, we can have more students enrolled. The relevant benefits that we have include the ability to reach out to more people, this leads to a projected increase in turn out.

The goal that we have from the implementation of the software is this should result in increased turn out by at least 10% and a time efficiency of an instant fashion. The reduction of time of emailing students will decrease drastically as well as increasing the rate of accuracy. The program can be implemented in less than 3 weeks from the start of the development process.

Out of Scope

The out of scope inside the project involves but is not limited to inaccessible databases. If these databases are out of access the program will be unable to pull from the database. The database should be accessed or gone through in order for the program to work with the correct efficiency.

1.3 Product Overview

1.3.1 Product Perspective

The prospective of this product involves replacing the manual emailing system for advising FGCU faculty members connected to FGCU Complete. This project can be further expanded to include separate universities and separate programs within the university. Additionally, the implications of the software can be expanded for business operations with marketing groups to sell more products to customers.

1.3.2 Product Functions

- Pull information from database
- Give employees option to compose email
- Send out emails through program in automated schedule

1.3.3 User Characteristics

The user class for this operation would involve a main class which will be the operating class. This class will have access to the entire software and can only be accessed through a Faculty email account through Microsoft Outlook connected to FGCU.

Key	Summary	Description	T	P
BAN-38	As a FGCU advising faculty member, I want the capability of a send button so that I can send an email to the students selected when the time is convenient.	This user story also provides the constraint that the system has to output an email in a quantified time.		⌃

BAN-37	As a FGCU advising faculty member, I want to have the ability to compose emails inside the user interface so that I can give the student the most optimal information about our program.	The email string shall be created through a textbox inside the program.			=
BAN-36	As a FGCU advising faculty member, I want to deselect any student so that special circumstances can be accounted for.	There can be errors outside the system that shall be accounted for.			=
BAN-35	As a FGCU advising faculty member, I want to select any student so that special circumstances can be accounted for.	Some students may be outside of the database, a system that is unaccounted for.			=
BAN-32	As a FGCU advising faculty member, I want to email every student who has a minimum of a 2.0 GPA, at least 30 transferable credit hours, and above a "C" in an English composition course, so that the student can join FGCU Complete.	The main and only user for program.			«

5 issues

1.3.4 Limitations

- Must have access to database
- The email must be a school email
- Software must be operated in python

1.4 Definitions

2. References

Kristen Vanselow- Interview conducted to seek out information regarding business practices.

FGCU Complete- Explains key details regarding program.

3. Specific Requirements

Key	Summary	Description	T	Linked Issues	P	Labels

BAN-47	REQ-20. The program shall include an "Exit" button which safely exits the program and logs out of the system.				=	Functional
BAN-46	REQ-19. The program shall include a "Deselect All" button which deselects every student from email list.				⌃	Functional
BAN-45	REQ-18. The program shall output a dialog box labeled "Connection Lost" when connection to internet is lost followed by logging out of the system.				⌃	Functional
BAN-44	REQ-17. The program shall have a "Remove All" button which will clear the list labeled "Selected Students".				⌃	Functional
BAN-43	REQ-16. The program shall have a "Remove Student" button which will remove student from list.				⌃	Functional
BAN-42	REQ-15. The program shall have a "Confirm" button which takes the list of students in "select Students" and moves them to "Selected Students"				⌃	Functional
BAN-41	REQ- 14. The program shall have an "Action" button which will send content from the "Send Email" button to the selected students' emails.				⌃	Functional
BAN-40	REQ-13. The program shall have a "Save" button which will commit the "Create Email" textbox to the "Send Email" textbox.				⌃	Functional
BAN-39	REQ-12. The program shall have a "Sign In" button which will log the user in to outlook.				⌃	Functional

BAN-31	REQ-11. Operators shall be able to change the email the program sends emails from				≫ Functional
BAN-29	REQ-10. Students from the email list shall receive an email as an output of the program.				≫ Functional
BAN-26	REQ-9, The program shall be robust to all inputs possible from users without any crashes.				≫ Nonfunctional
BAN-25	REQ-8. The program shall only allow the operator to use Florida Gulf Coast University emails				⌄ Nonfunctional
BAN-24	REQ-7. The program shall include a "Send Email" button which sends an email to all students within the email list.				⌃ Functional
BAN-22	REQ-6. The program shall include a "Deselect" button which deselects a single student from the email list.				= Functional
BAN-21	REQ-5. The program shall include a "Select" button which selects a single student without any constraints to add to an email list.				= Functional
BAN-20	REQ-4. The program shall be created using Python				⌃ Functional
BAN-19	REQ-3. The program shall have a "Select All" button which selects students in constraints of FGCU Complete program to select emails from these students.				⌃ Functional
BAN-9	REQ-2. The operator shall be able to compose an email through a large textbox with a save button.				= Functional
BAN-8	REQ-1. The system shall have have emailing capability through Microsoft Outlook.				≫ Functional

20 issues

4. Verification

Key	Summary	verification approach
BAN-47	REQ-20. The program shall include an "Exit" button which safely exits the program and logs out of the system.	Inspection
BAN-46	REQ-19. The program shall include a "Deselect All" button which deselects every student from email list.	Test
BAN-45	REQ-18. The program shall output a dialog box labeled "Connection Lost" when connection to internet is lost followed by logging out of the system.	Test
BAN-44	REQ-17. The program shall have a "Remove All" button which will clear the list labeled "Selected Students".	Test
BAN-43	REQ-16. The program shall have a "Remove Student" button which will remove student from list.	Test
BAN-42	REQ-15. The program shall have a "Confirm" button which takes the list of students in "select Students" and moves them to "Selected Students"	Test
BAN-41	REQ- 14. The program shall have an "Action" button which will send content from the "Send Email" button to the selected students' emails.	Test
BAN-40	REQ-13. The program shall have a "Save" button which will commit the "Create Email" textbox to the "Send Email" textbox.	Test
BAN-39	REQ-12. The program shall have a "Sign In" button which will log the user in to outlook.	Test
BAN-31	REQ-11. Operators shall be able to change the email the program sends emails from	Test
BAN-29	REQ-10. Students from the email list shall receive an email as an output of the program.	Demonstration
BAN-26	REQ-9, The program shall be robust to all inputs possible from users without any crashes.	Test
BAN-25	REQ-8. The program shall only allow the operator to use Florida Gulf Coast University emails	Demonstration
BAN-24	REQ-7. The program shall include a "Send Email" button which sends an email to all students within the email list.	Test

BAN-22	REQ-6. The program shall include a "Deselect" button which deselects a single student from the email list.	Test
BAN-21	REQ-5. The program shall include a "Select" button which selects a single student without any constraints to add to an email list.	Test
BAN-20	REQ-4. The program shall be created using Python	Analysis
BAN-19	REQ-3. The program shall have a "Select All" button which selects students in constraints of FGCU Complete program to select emails from these students.	Test
BAN-9	REQ-2. The operator shall be able to compose an email through a large textbox with a save button.	Demonstration
BAN-8	REQ-1. The system shall have have emailing capability through Microsoft Outlook.	Inspection

20 issues

5. Appendices

5.1 Assumptions and Dependencies

- FGCU has a database containing GPA, Course Hours, and Credits, as well as classes.
- The faculty members have a degree of inaccuracy in their work which can be improved.
- Turnout could be increased have all the students who qualify fit into the email list.

5.2 Acronyms and Abbreviations

FGCU- Florida Gulf Coast University

GPA- Grade Point Average