

Business Requirements Specifications (B.R.S.)

1: Introduction

1.1 Business purpose:

"To facilitate the communication of students interested in Software Engineering and provide new activities for them." -Jeffrey Munoz, Club President

1.2 Business scope:

Limited to current, full time F.G.C.U. students of all majors. The Software Engineering Club is an official F.G.C.U. student organization and must adhere to all of the school's policies, rules and regulations.

1.3 Business overview:

"Come and hang out with the software engineering club! We are a group of like-minded people coming together to learn the newest technologies along with hearing from those in the industry. Whether you are just starting to get interested in programming or are a pro, we have something for you! If you aren't a software engineering major, but would like to know more about computers or coding then come out and join us! " (<https://getinvolved.fgcu.edu/organization/seclub>)

Meetings held once a week. One "major" event every month. Explores different facets of software engineering and related fields and interests. The Software Engineering Club is an official Florida Gulf Coast University club so it must adhere to all of its rules, policies and regulations.

1.4 Definitions:

F.G.C.U. - Florida Gulf Coast University

Students - A person who is studying at a school or college.

Software - the programs and other operating information used by a computer.

Software Engineering - Software engineering is the process of analyzing user needs and designing, constructing, and testing end user applications that will satisfy these needs through the use of software programming languages. It is the application of engineering principles to software development.

1.5 Major stakeholders:

Club Members:

Limited to current students of F.G.C.U. of all majors. Current roster is 143 members.

Officers of the Club:

President: Jeff Munoz

Primary Contact: Travis Gayle

Vice President: Ramsey

Assistant Treasurer: Luis Hernandez

Assistant Secretary: Jeremy Martin

Advisor: Professor Vanselow

2: References

F.G.C.U. Gulfline Club Page:

<https://getinvolved.fgcu.edu/organization/seclub/roster>

F.G.C.U. Student Involvement Page:

<https://www2.fgcu.edu/studentervices/StudentInvolvement/forms2.html>

F.G.C.U. Registered Student Organization Advisor Manual:

https://www.fgcu.edu/studentlife/studentorgs/files/Advisor_Manual_18-19.pdf

Software Engineering Club President:

Jeffrey Munoz

Software Engineering Club Advisor:

Professor Vanselow

3: Business management requirements

3.1 Business environment:

Non-traditional work-place. Most communication is done through Discord App between group members and Officers of the club. Website needed.

3.2 Mission, goals, and objectives:

To facilitate the communication of students interested in Software Engineering and provide new activities for them.

3.3 Business model:

The club is a non-profit group with elected student officials as well as a current F.G.C.U. Professor as a club Advisor. The club is subsidized by F.G.C.U. and is subject to all of its rules, policies and regulations.

3.4 Information environment :

Information is freely available between Officers and Members of the club. The whole objective of the club is to provide as much information to its members as possible.

4: Business operational requirements

4.1 Business Processes:

The Software Engineering club meets every Wednesday during the spring and fall semesters. They also have a larger "event" every first Wednesday of the month. They also coordinate other events such as E-Week and "Hackathons" as well as connect students with industry professionals. During a typical weekly meeting they:

1. Meet and greet with new and existing members,
2. Discuss upcoming events,
3. Take attendance,
4. Cover the material for that meeting, this is usually a presentation either by the Club President or a guest speaker but can also be an event or competition.

4.2 Business operational policies and rules:

The club must adhere to all of F.G.C.U.'s policies. Open to all F.G.C.U. students and only F.G.C.U. students. They must follow the academic calendar. The club must adhere to all policies put forth in F.G.C.U.'s Registered Student Organization Advisor Manual. The link to the manual can be found here https://www.fgcu.edu/studentlife/studentorgs/files/Advisor_Manual_18-19.pdf.

4.3 Business operational constraints:

The times of their meetings is their most challenging constraint, several factors that affect this are:

1. Room availability is an issue with all of the classes going on in the Engineering Hall.
2. Students schedules it is difficult to schedule a time that also agrees with the times that the club members have classes.

The limited budget is another of their constraints the lack the ability to provide as much food and free events as they would like to. The president said most of their budget goes to the pizza at the monthly events.

The club must also adhere to Florida Gulf Coast University's schedule. This includes any holidays that the school is shutdown or any weather induced schedule changes. They do not have access to the buildings when the campus is closed.

4.4 Business operational modes :

If the school is closed due to a holiday or natural disaster the club does not have access to the rooms. When this happens the club does not meet during that week. This could create an additional requirement for the system, not only should it provide notifications to the students, it could also allow for remote meetings.

4.5 Business operational quality:

The club meetings require high reliability in order to deliver accurate, useful information to the club members.

The announcements, and much of what the proposed system will handle, will value urgency as well as accuracy since bad, late information is totally useless.

4.6 Business structure:

President:

The group President is the face of the club, he leads the meetings and is the direct interaction with the club members. Presides at all meetings of the organization. Calls special meetings of the organization. Schedules meetings for the organization. Obtains appropriate facilities for organization activities. Prepares and files any reports that are required. Appoints committee chair people. Completes annual Recognition Forms. Attends Registered Student Organization Meetings. Represents organization at official functions. Maintains contact with organization advisor. Maintains contact with organization alumni. Maintains contact with affiliated department or section. Maintains contact with national organization. Remains fair and impartial during organization decision making processes. Votes in cases where there is a tie. Coordinates Organization elections. The President should have full access to modify the system.

Vice President:

The Vice President assists the President and co-leads the group meetings and events. Assume the duties of the President as needed. Serve as an ex-officio member of standing committees. Plans officer's orientation and organizational retreats. Coordinates organizational recruitment efforts. Represents organization at official functions. Remains fair and impartial during organizational decision making processes. Coordinates organization elections. The Vice President should have full access to modify the system.

Treasurer:

The Treasurer handles everything budget related such as events and "Hackathons". Keeps all financial records of the organization. Pays organization bills. Collects organization dues. Prepares and submits financial reports to the members. Prepares an annual budget. Prepares all budget requests for funds. Is familiar with accounting procedures and policies. Advises members on financial matters (i.e. vendors, ticket selling procedures). Coordinates fund raising drive. Represents organization at official functions. Remains fair and impartial during organization decision making processes. The Treasurer should have limited access to modify the system based on the discretion of the President.

Secretary:

The Secretary handles everything record keeping as well as announcements. Keeps a record of all members of the organization. Keeps a record of all activities of the organization. Keeps and distributes minutes of each meeting of the organization. Creates and distributes agendas for each meeting of the organization. Notifies all members of meetings. Prepares organization's calendar of events. Schedules all practices, classes, and other activities of the organization. Obtains appropriate facilities for organization activities. Prepares and files any report required. Handles all official correspondence of the organization. Manages organization office space. Collects organization mail from the advisor or wherever mail is received. Represents organization at official functions. Remains fair and impartial during organization decision making process. Coordinates organization elections Should have access to modify the system based on the discretion of the President.

Advisor:

The advisor is a Professor from F.G.C.U. who assists with the meetings and ensures the accuracy of information and assists with preparing for and leading the meetings as well as coordinating events. The advisor must facilitate discussion and be a sounding board for ideas. Organize and provide the structure of a retreat. Offer suggestions on various questions. Refrain from telling new officers what they should do. Fill in the blanks. If an outgoing officer doesn't know how something was done, or doesn't have records to pass on to the new officer, you can help that officer by providing the information he or she doesn't have. The advisor should have full access to modify the system.

Club Members:

The Club Members are current F.G.C.U. students of any major with an interest in Software Engineering and related fields. Club

members attend the meetings and events. Club members should have limited access to the system such as commenting on posts, sending messages etc.

5: Preliminary operational concept of proposed system

5.1 Preliminary operational concept:

a: operational policies and constraints:

Insurance: Florida Gulf Coast University does not provide insurance for student organizations. R.S.O.s are responsible and liable for the actions and behaviors of their members and officers. Any damages to persons or property need to be covered by the personal insurance of the participants. In addition, if the organization contracts to receive services from a third party, the organization should confirm that the third party has sufficient insurance. A copy of the vendor's insurance policy should be included with the Event Registration Forms (https://www.fgcu.edu/studentlife/studentorgs/files/Advisor_Manual_18-19.pdf)

Affiliating with a Parent Organization: Registered Student Organizations may choose to be affiliated with a local/state/national organization, such as a charity, faith community, political party or fraternity/sorority. The student organization must state the name and nature of the affiliation (often the parent organization has a sample constitution for college student organizations to model). The campus organization must obtain in writing a statement from the parent organization that the Florida Gulf Coast University chapter has permission to use the 12 name and represent the organization. Control of the student organization must reside with the students, with all the operating decisions made by the students. *Social Fraternities and Sororities must comply with the University Regulation: FGCU-PR4.009.

(https://www.fgcu.edu/studentlife/studentorgs/files/Advisor_Manual_18-19.pdf)

Hazing: Acts as defined in Section 1006.63, Florida Statutes, as well as any action or situation which recklessly or intentionally endangers the mental or physical health or safety of a student for purposes including, but not limited to, initiation or admission into or affiliation with, or as a condition of continued membership in, a University registered group or organization. Express or implied consent of the Impacted Student will not be considered as a defense. All provisions of Section 1006.63, Florida Statutes, are applicable to an allegation of hazing.

(https://www.fgcu.edu/studentlife/studentorgs/files/Advisor_Manual_18-19.pdf)

Gambling and Fundraising: Gambling is not allowed on campus and is defined as: an unlawful game of chance for money or for anything of value on University premises or at any affair sponsored by a student organization. To sell, barter, or dispose of a ticket, order, or any interest in a scheme of chance by whatever name on University premises or at any affair sponsored by a student organization. To wager on a University team or organization in a competition with a direct interest in the success of the competition. Fundraising projects must be conducted in a lawful manner and in compliance with University regulations. State law prohibits raffles and lotteries except within very specific perimeters involving sales promotion activities which are strictly regulated. Organizations may operate "drawings by chance" utilizing material prizes, cash prizes are prohibited. The law requires specific disclosures and procedures, 849.0935, FS. Permission for student organizations to organize "drawings by chance" on University premises or at any sponsored affair must be secured from the Office of Student Involvement prior to an announcement of the event.

(https://www.fgcu.edu/studentlife/studentorgs/files/Advisor_Manual_18-19.pdf)

Non Discrimination: In order to comply with the University's commitment to non-discrimination, no discrimination shall be made on the basis of gender, race, color, creed, age, religion, disability, national origin, marital status, sexual orientation, parental status or veteran status.

(https://www.fgcu.edu/studentlife/studentorgs/files/Advisor_Manual_18-19.pdf)

Concerns: Below are steps to follow if any member of an RSO has a concern regarding their student organization: 1. The concerned party should notify the Office of Student Involvement and document the situation 2. A staff member from the Office of Student Involvement will meet with the student and the Student Organization to attempt to remedy the situation 3. If the concern constitutes a violation of the Student Code of Conduct, the issue will be forwarded to the Office of Student Conduct and/or Dean of Students Office for review and further action, if necessary.

(https://www.fgcu.edu/studentlife/studentorgs/files/Advisor_Manual_18-19.pdf)

The user's private information must be protected.

Since this is a school club they have a very small budget which limits the scope of the product.

There is limited server space but this should not be an issue since the school's servers are significant.

b: description of the proposed system:

The system will be an open-source website that will help expedite the delivery of information to members and keep the group members better connected. It will accomplish this through group boards, event boards and direct messaging. The website will have different levels of access permissions based on the specific role in the club. This will limit regular members ability to make changes etc.

c: modes of system operation:

The system will always be up when possible and will be refreshed whenever an administrator makes any changes. In the event of F.G.C.U. server shutdown the website will restore once the servers are back online.

d: user classes and other involved personnel:

There would be different account and accessibility based on the member's role in the club. The facilitators of the club will have the ability to make changes to the website. The regular club members will not be able to make changes but will be able to interact with it by commenting on event, confirming their attendance etc.

e: support environment.

The website will run on the F.G.C.U. server. The system will be maintained and updated by the club facilitators as well as club members with permission.

5.2 Preliminary operational scenarios:

- 1.The president of the club can post events that the club members can then read about, comment on, share, and say if they are going or not.
- 2.The members can ask questions about events directly on the event posting. These questions can be to the facilitators of the group or other members.
- 3.The group members can ask questions directly to the facilitators of the club as well as other members.
- 4.The website will also have a page with general club information, their goals, mission etc.

6: Other preliminary life-cycle concepts

6.1 Preliminary acquisition concept:

The stakeholders would be very involved in the making of this program since it would be a very user-heavy program. Since it is such a user-heavy program rapid-prototyping could be a viable option. The system will be open source so the code will be immediately available for the members.

6.2 Preliminary deployment concept :

The system would be first introduced and taught to the facilitators of the club who would then train the club members on it's use. The system will also come with an instruction manual to assist in training the users.

6.3 Preliminary support concept :

The system, just like any system will need to be monitored and maintained. The system will be open source to allow club members and facilitators to update and maintain it. This will hopefully help create a sense of ownership among the members of the club as well as continue to improve upon the system and keep within the club's budget constraints.

6.4 Preliminary retirement concept :

The system will eventually be succeeded by a newer program as software develops at which time it will be retired. All pertinent information will be transferred to the new system and the old system will be wiped to protect the integrity of the user's information.

7: Project Constraints

The budget for this project is very limited because it is a school club.

Due to the budget constraint, staff will be limited.

The system must adhere to all of F.G.C.U.'s policies both for student organizations as well as its digital systems rules . A link to the student organization policies is here. https://www.fgcu.edu/studentlife/studentorgs/files/Advisor_Manual_18-19.pdf

The schedule would be less of an issue because it will be open source so it will be continuously updated and improved upon.

Open source project that the club could continue to improve upon.

8: Appendix

8.1 Acronyms and abbreviations:

I.O.S.: iPhone Operating System

F.G.C.U.: Florida Gulf Coast University

Students: A person who is studying at a school or college.

Software: the programs and other operating information used by a computer.

Software Engineering: Software engineering is the process of analyzing user needs and designing, constructing, and testing end user applications that will satisfy these needs through the use of software programming languages. It is the application of engineering principles to software development.

R.S.O.: Registered Student Organization.

B.R.S.: Business Requirements Specifications.