

Software Requirements Specification

Residential Connection

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1. Introduction

This section gives a scope description and overview of everything included in this SRS document. Also, the purpose for this document is described and a list of abbreviations and definitions is provided.

1.1 Purpose

The Software application should be develop in order to help the Department of Housing and Residence Life improve their services to the residents at Florida Gulf Coast University. The Software will be primarily used by residents, who are student that live in on-campus housing, and Resident Assistants who are student staff. The software purpose is to increase effective communication, encourage student involvement in housing and support RA in accomplishing their duties and responsibilities

Improve attendance on the educational programs hosted by the RAs, where resident have the opportunity to interact with their RAs and meet other residents. Allowing the funds provided to be put to good use.

Encourages residents to get to know their roommate and hallmate in order to develop a home like environment where everyone feels safe and comfortable in the residence halls.

Build a strong connection between housing staff and residents to improve overall communication which provides confidence and acceptance. In which students can voice their concerns or opinions on activities or lack thereof to staff members to make a positive change.

Develop awareness to residents about the many opportunities offered by the university from leadership (e.g. Area Council, Student Conduct) to service (Volunteer, student staff)

opportunities. This is so student have something other than academic to focus on that help with gaining experience and develop personal growth.

1.2 Scope

Product Name

The software product to be produce will be NeatHallz a mobile social networking application.

Overview

The application will allow Resident Assistants to communicate information in the form of texts, graphics, survey etc. to the residents and the residents will be able to provide the Residents with feedback in the form of questions, comments and responses to surveys.

Residents will also be able to share their own information like what RSO they are involved in, events going on in campus, help forming a study groups and making new friends. This would then allow RAs and well as RDs to see how residents under their supervision are doing overall physically, mentally and emotionally.

Goals

The Office of Housing and Residence Life goal is to provide students with the option to have an exceptional residential experience. An experience that will prepare students to be successful not only at the university level but also globally. The Office of Housing and Residence Life attempt to offer students an easy transition into the community where support and resources are offered to encourage academic achievements, student involvement and personal growth. The software will allow students to have access to information shared by

RAs in a matter of a couple seconds. With the software residents will be able to ask questions about resources offered like CAPs, Adaptive Services and Tutoring, receiving a response within 24 hours. RAs will be given the opportunity to ask residents what types of programs they would like to see ones that involve arts & crafts, sport activities or other activities by the use of polls and survey receiving a 60% response rate from residents. This would allow attendance to programs by residents to increase by 30%..

Objectives

To build a simple software for this organization to help expand a better learning opportunity, knowledge and skills

To develop a secure software all resident are able to utilize to communicate with one another as well as their RAs during the school year.

Allow users to share important information related to the university and the well-being of others.

Provide easier access to users to get in touch with someone to receive quick feedback

Increase interaction among residents and program attendance rate

Helps housing staff determine improvements in residence halls and policies

Out Scope

Private Messaging capabilities among residents

A set calendar of housing events for the semester

Ability to prioritize posted information from low-high

Requiring all resident to register and use the application weekly

1.3 Product overview

1.3.1 Product perspective

With the department of Housing and Residence Life the main form of communication within the department is the FGCU eagle email system that is used to send out important information to residence that live of campus about programs going on in housing. the administration staff is able to send further information to student staff about rules and regulations that need to be followed, task that need to be completed and many other important information is sent through the eagle email.

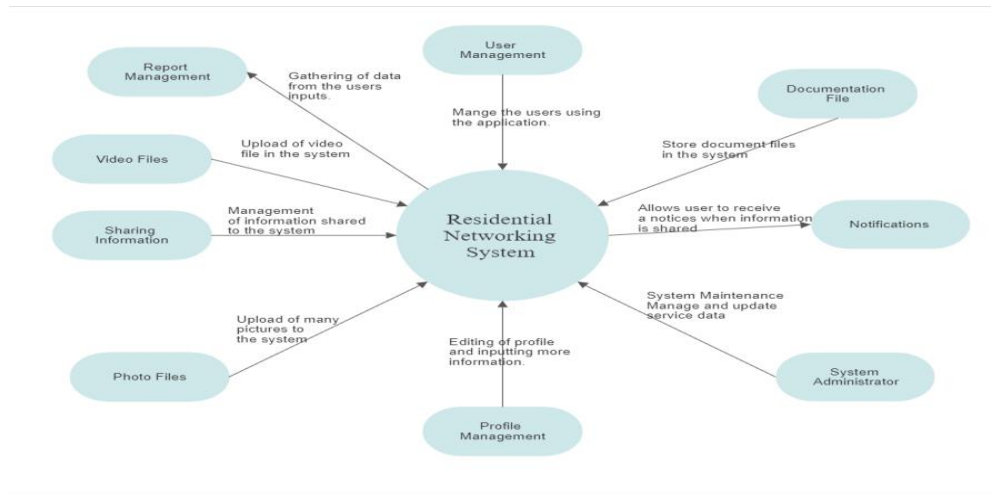
Another form of communication is eRezLife a system that allows the administrative staff to keep track of the students who want to apply for jobs offered by the Department of housing. The administration staff is able to collect the information required about the students that apply and analyze why they are interested in certain positions. Resident Assistant are able to submit there work on the bulletin board, their program flyers and are able to submit other forms on the site. Residence are able to view program and that will be happening in housing, this includes South Village, North Lake and West Lake, throughout the week.

Microsoft Teams is another communication tool used in housing by Eagle and Osprey Hall this is primarily used for DAs to record information that occurred at the front desk during each DA's respective shift. It allows DAs to communicate effectively without the need of leaving sticky notes with vital information. needed to know for the next DAs working the desk.

The product is to be similar to all the communication system listed above, those the new software system will not be a part of any larger system the system will indeed have similar features to the larger systems. The system in the stakeholder perspective is to allow housing staff to communicate with the residence by allowing the staff to share information in different

forms in the software system. The idea is that the software system will be specifically design for the Office of Housing and Residence Life to use as a primary form of communication.

Context Diagram



1.3.2 Product functions

A social networking software application design for residents living on-campus. Allow residents to contact their Resident Assistant

Via private chats in the resident assign subgroup residents should be able to contact their assigned RA regarding policies, resources offered and other question regarding the university.

A dashboard allowing communication among all users

This is the place where post are display and are visible to every use. This will help with the sharing of information to everyone in the residence halls at once. It also allows for residents to ask questions and receive replies from other users.

RAs will be able to formulate surveys and polls

RAs will use this function to collect data from residents in order to help RAs develop the type of programs they will put on throughout the semester. It may help them determine the day and time that would be most appropriate to host a program that residents would attend

Posting of Flyers

Many of the information and event going on in housing is typically shared through the use of flyer so the software will allow users to post flyer. Specifically, for flyer post there will be a feature that allow resident to select “will attend”, “cannot attend” or “maybe” button.

Tracking Attendance to programs and meetings

This feature will make it easier for RAs to track how many residents attended their programs and meeting throughout the semester. Providing information about who attend the meeting, programs that are popular and give an idea of which times are best for residents.

1.3.3 User characteristics

Primary Users

Residents : The business (Housing and Residence Life) exist to serve the residents who live on campus. In order to keep the business, there need to be residents to provide service to, they will be one of the primary users. After the delivery of the system residents would be able to provide feedback on how to improve the system for their personal benefit.

Resident Assistants: The RA are the one who commission for a system that helps them increase communication with residents. Increasing communication will help RAs with the task of putting on educational programs that residents would be interested in attending and it would provide a better connection between residents and RAs overall.

Resident Director: RDs are the staff members that oversee the work of the RAs in that they ensure RAs are doing their job of communicating with the residents and make sure residents participate as much as possible in events and services provided by housing. RDs would be able to use the system and make sure the atmosphere in the residence hall is welcoming by seeing what residents and RAs post.

Resident Team Assistant Leader: The RTLA has a similar role in which they assist both the RD and RA with their tasks. They help RAs with learning how to connect with residents and how to plan and advertise their programs among other responsibilities.

Assistant Directors : The Assistant Director is person in responsible in supervising the RDs they are the ones who make executive decision regarding Residence Life. They ensure the whole housing community is accomplish their task and meeting the business goals.

Employees of the business

Directors: Are the ones in charge of Housing and residence life as a whole they are the ones who would need to approve the system based on the need and purpose.

Administrators : Works in the business by helping the director by organizing specific aspect of the business, may but into place some rules and regulation, but just like the directors will not need to use the system. Those they will benefit from the success of the business.

Housing Specialists: Work on the operation of the desk so don't need to use the application as frequently but may be able to request the RDs to share information and announcement using the system.

Coordinators: Administrative task in the residence hall so may hear about the system and see some benefit from the system but will not directly interact with the system.

Desk Assistant: Work at the front desk constantly helping out residents therefore although the DA won't need to use the system, they will have to have some knowledge of the system and how it operates in order to help them help the residents.

Marketing: May help with advertising the system to residents and analysis what feature are most needed and use. As the marketing market for major event happening around campus and other thing to promote on campus living.

Information System Administrators: May help with determining the quality of the system and how to best integrate it into being a housing official service that is being utilized effectively.

Other

Parents/ Guardians : Are the one who typically worry about their students and hope they are having a good time in college. Parents would want to ensure their student and their information is secure. So, parents aside from the residents may have question the purpose of the system and the security it has to ensure it is safe and appropriate to use.

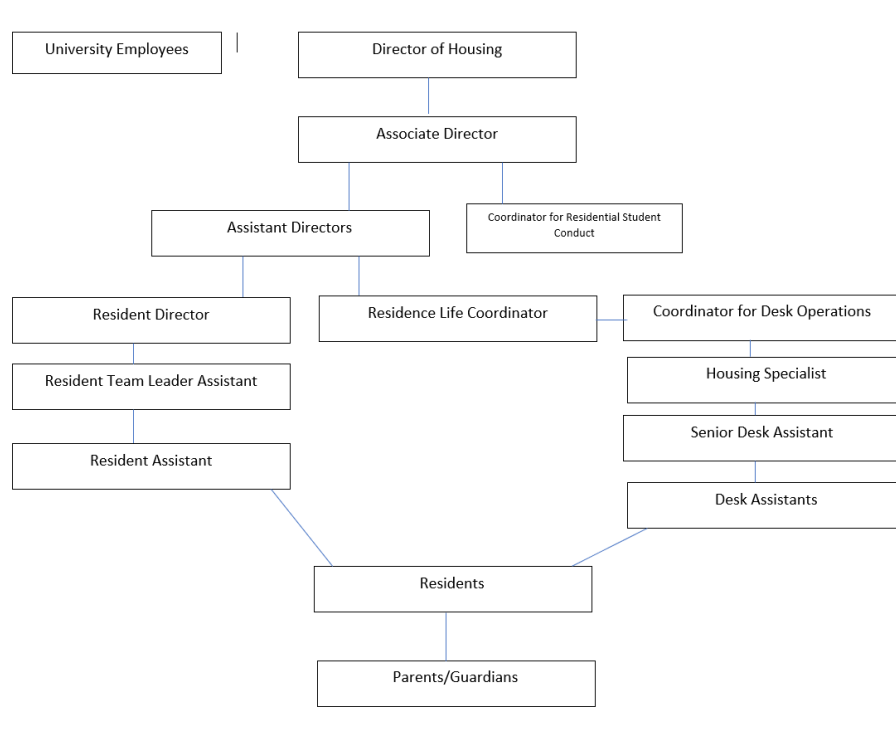
Perspective Students: Seeing a social media design system may entice prospective student to the university as it would show to them that the university really do care about the student and their commitment to encouraging student involvement and interaction on campus.

The University investors : If the system were to accomplish its goal then investors may see how community oriented the university is with a lot of social interactions and an increase in student's involvement on campus. This may allow investor to contribute more funds or simply help them with their decision to continue to contribute to the university.

The Software Developer : The people developing the software so they will certainly have an impact on the software as they will guide the way the software is developed by providing their

own input and ideas for the system. Software Developer main goal is to help the business obtain a system that will positively contribute to the business goals.

Org Chart Sample



1.3.4 Limitations

Organizational: The Software application should be develop in order to help the Department of Housing and Residence Life improve their services to the residents at Florida Gulf Coast University. The Software will be primarily used by residents, who are student that live in on-campus housing, and Resident Assistants who are student staff. The software purpose is to increase effective communication, encourage student involvement in housing and support RA in accomplishing their duties and responsibilities. As it is the goal of the Office of Housing

and Residency life to provide the residents the resource to succeed academically and achieve personal growth while in college through networking and allowing time for extracurricular activities.

Environmental: In order to develop the system idea for this business stakeholders looked into existing software. Software such as popular used social media sites as well as university utilized applications. From these software stakeholders were able to pinpoint software feature that should help reach the business goal if implemented into a new system. To the knowledge of the software developer most of the feature required in the new system is achievable based on what is already available in other systems. Those the stakeholder should understand that not all need feature will be implemented at once instead it would be a gradual development in order to see how it operates and if user find it useful.

Constraints: As of now it is predicted that it would take a year to develop the new system. In which software developer meets with stakeholder twice a month to ensure all software needs are developing in the correct manner as well as staying on track with the full development of the system. It is still unknown about the funding that would be provided for the software development at the moment because business funds vary year to year. Those to start the development of the system and provide continuous maintenance would cost around \$1000. The intention is to facilitate the system to work with the user in that it would be easy to implement the system use into the current user schedule which is why it seem best that the system be present in the form of a mobile application.

1.4 Definitions

The strategy is to determine the primary needs of the system as well as further understand the users of the system. Understanding the user refers to understanding the demographics of the users, educational background and level of technical skill as well as primary lifestyle. In this case the majority of users are college level students with busy life with a decent level of technical skill as they use phones and laptop constantly. Understanding this information helps develop the tools and resources needing to be use to develop the system. For this mobile application can be used such a android studios from this it allows use to understand how to format the system to be helpful to users.

This system is closely related to the social media sites like Facebook and Instagram those these current and use product is to help users stay connected with other as well as give user the ability to share information quickly and efficiently. Those unlike these personal social media site the system being developed will be gear toward on campus residents to improve the sharing of information and communication.

Another existing product that the university is attempting to promote for increase use by university staff and student is EagleLink. Eaglelink is a website that allows university student and staff to search events, student register organization and new articles related to the university. Overall the EagleLink website is meant to encourage and help those at the university get involve on campus. Some similar feature that the new system should have that EagleLink already has is the capability to RSVP for events, track attendance at events and submits important forms posted on the website. Eaglelink is a great resource but its target audience involves everyone at the university which means there can be a lot of information

that a user would have to go through to find what they would want to get involve with based on the location, availability and event. Another aspect is that EagleLink is a website which isn't as convenient as a mobile application that user can have access to right away.











The current product being use in housing as one of the main forms of communication between Resident Assistants and Residents is GroupMe as it is quick to send messages to many recipients. GroupMe also allows users to create polls but the information it provides, number of total answers and the given response for each option, is limited. Other than this user can also create event reminders and see the residents interested in going to a particular event. The new system is meant to provide users with more features and tool to be able to analysis the information obtained.





2. References

- [1] IEEE Software Engineering Standards Committee, “IEEE Std 29148-2018, IEEE International Standard - Systems and software engineering -- Life cycle processes -- Requirements engineering”, November 1, 2018.
- [2] ” MITRE Systems Engineering Guide ” The MITRE Corporation,2014
- [3] Pierre B., Richard E. F, “SWEBOK V3.0 F Guide to the Software Engineering Body of Knowledge”, 2014.
- [4] Kenny Wong, “Client Needs and Software Requirements” Coursera Course, University of Alberta,2020.
- [5] Karl Wieggers, Joy Beatty, “Software Requirements Third Edition" Microsoft Press, 2013

3. Specific requirements

This section contains all of the functional and quality requirements of the system. It gives a detailed description of the system and all its features.

Key	Summary	T	Description	Linked Issues	P	Labels
RA-28	User should be able to search for other users' posts ,in the search bar, who also have authorization to access the application.		User will be able to find other user that are in the system.		↑	Functional Interface Usability
RA-27	An update to a users list of posts shall appear in 3 seconds for 90% of the users		A nonfunctional requirement that states when a post should be visible to most other users in the system.		↑	Nonfunctional Performance
RA-26	After submitting a post through the mobile device interface , it shall be available to appear to other users' lists of posts within 30 seconds for 90% of posts.		A nonfunctional requirement that informs the developers and clients how fast a post will be visible to other user have it is posted.		↑	Nonfunctional Performance
RA-25	The users shall be able to post at most ten pictures at a time on the dashboard for each post.		This features limits the number of picture that can be upload in a single post.		↓	Functional Usability
RA-24	Users shall be able to choose if nobody, everyone or friends will be able to view their post before the user post		It provide the user the option to decide who can view their post.		↑	Functional Interface Usability
RA-23	The system shall allow users to upload one .jpeg type picture at a time to their profile to set as their profile picture.		This allows user to have a profile picture which allows other user to identify them.		↑	Functional Interface
RA-22	Users shall be able to customize their default profile by adding further information to the text boxes displayed under the profile page.		This allows all user to edit their profile to be unique to the user. It allows users to share more information about themselves like biography, major, interests and hobbies.		↑	Functional Interface
RA-21	Users shall be able to post text updates in the form of a question. Once the user selects the post button on the homepage the user will be able to start creating post.		This allows user to place questions on the dashboard so that it is visible to everyone in order to receive an answer.		↑	Functional Interface Usability
RA-20	The system shall block users form submitting an answer to post that are flyers, polls and surveys if they do not have the necessary credentials. poll		The housing staff are not allowed to submit answer to the post that they create of flyer, polls and survey. This feature is developed for residents to use.		↑	Database Interface Nonfunctional
RA-19	The system shall block user from access to the flyer, poll and survey dashboard posting feature if they do not have the necessary credentials.		The housing staff are the users who are able to create polls, survey and create flyer to collect needed information from residents.		↑	Database Interface Nonfunctional

RA-18	The system shall block user from access to the analytical reports if they do not have the necessary credentials.		These reports are generated when items such as polls, flyes and surveys are answered.		Databas e Function al Interface Performa nce
RA-17	The user shall be able to access the system with a username and password that contains at least eight characters.		This requirement is related to how users are going to be able to get access to the system to use it.		Function al Usability

Use Case: 1

- **Use Case Names (Brief and Descriptive)**
 - Application Login
- **Unique Identifier**
 - RA-1
- **Brief Description**
 - The software application shall have restrictive access. The user needs to first login to the application in order to access the system. First when the user opens the application the system will request the user to enter a Username and password. Then the user will have to enter their username and password into the system. After entering the information, the system will validate the username and password if it is correct the application will proceed to the homepage otherwise the system will display an error message on the screen.
- **Pre-Conditions**
 - The user must download the application to their mobile devices. Also to have authorization to access the system the user's username and password should be recorded in the system's database.
- **Post-Conditions**
 - The user will be redirected from the login screen to the homepage of the application. Allowing the user to utilize the feature provided to them depending on the type of user they are in the system.
- **Basic Flow / Course Of Action (Sunny Day Scenario)**
 - 1. The user shall open the application on their mobile device
 - 2. The user shall then enter their username and password
 - 3. The system will validate the user's credentials
 - 4. The screen will be redirected from the login screen to the homepage screen.
- **Alternate Flows**
 - 1. The user shall open the application on their mobile device
 - 2. The user shall then enter their username and password
 - 3. The system will validate the user's credentials
 - 4. The user's credentials are invalid an error message popup that user is denied access into the application
 - 5. On the login screen there is a link that allows user to change their password.
 - 6. User goes to login screen to enter username and password again
 - 7. The system will validate the user's credentials
 - 8. The screen will be redirected from the login screen to the homepage screen.
 - 1. The user shall open the application on their mobile device
 - 2. The user shall then enter their username and password
 - 3. The system will validate the user's credentials
 - 4. The user's credentials are invalid an error message popup that user is denied access into the application

Other

- **Actors (Roles, Not Real People, With Brief, Descriptive Names)**
 - Residents
 - Resident Assistants
 - Resident Directors
- **Goals**
 - In order to validate the authorization to access the application.

Use Case: 2

- **Use Case Names (Brief and Descriptive)**
 - Dashboard Post
- **Unique Identifier**
 - RA-3
- **Brief Description**
 - Users should be able to post information such as text, images, fliers, polls and surveys in the dashboard. This post will be visible to all user. The user will see the post on the homepage of the application. The features available for posting will be dependent on the type of users the user is categorized in the application.
- **Pre-Conditions**
 - The capability of posting on the dashboard will be available on the dashboard. Users must be logged into the application in order to post information.
- **Post-Conditions**
 - The post should be displayed in the homepage and be visible to all users. This will then allow other users to obtain the information and respond accordingly to the post. The users are also able to edit or delete post that have already been published to the homepage.
- **Basic Flow / Course of Action (Sunny Day Scenario)**
 - 1. User goes to the dashboard and select the share button
 - 2. The system will display feature available to the user
 - 3. The user selects how they want to display their information
 - 4. User inputs their information accordingly uploading an image, typing in the text box or creating a survey.
 - 5. User selects the post button
 - 6. The system display a warning message
 - 7. User click ok, and the post gets displayed on the homepage
- **Alternate Flows**
 - 1. User goes to the dashboard and select the share button
 - 2. The system will display feature available to the user
 - 3. The user selects how they want to display their information
 - 4. User inputs their information accordingly uploading an image, typing in the text box or creating a survey.
 - 5. User selects the post button
 - 6. The system display a warning message of inappropriate content found
 - 7. User edits the information
 - 8. User clicks the post button

Other

- **Actors (Roles, Not Real People, With Brief, Descriptive Names)**
 - Resident Assistants
 - Resident Directors
- **Goals**
 - Allow users to share information in a variety of ways

Use Case: 3

- **Use Case Names (Brief and Descriptive)**
 - Customizing Profile
- **Unique Identifier**
 - RA-12
- **Brief Description**
 - Users will be able to manage their profile. The users will be able to add information to their profile. The user will also have the option of deleting information. An upload profile photo feature will be available to the users.
- **Pre-Conditions**
 - A default profile will have been established by the system with the user's basic information of themselves. The system will inform the users about the information they would be able to add or edit.
- **Post-Conditions**
 - The profile will be updated to the save information inputted by the user. The updated profile will be visible to all user of the application.
- **Basic Flow / Course of Action (Sunny Day Scenario)**
 - 1. The user will navigate to their profile page
 - 2. The user will click the manage profile button
 - 3. The system will display to the user the information they are able to edit and the information they cannot change
 - 4. User will click the text box and input their information
 - 5. User click the save button
- **Alternate Flows**
 - 1. User can click their profile
 - 2. The system will redirect to the profile management page
 - 3. The system will display to the user the information they are able to edit and the information they cannot change
 - 4. User will click the text box and input their information
 - 5. User click the save button

Other

- **Actors (Roles, Not Real People, With Brief, Descriptive Names)**
 - Residents
 - Resident Assistants
 - Resident Directors
- **Goals**
 - Allow user to show who they are as a student/ staff.

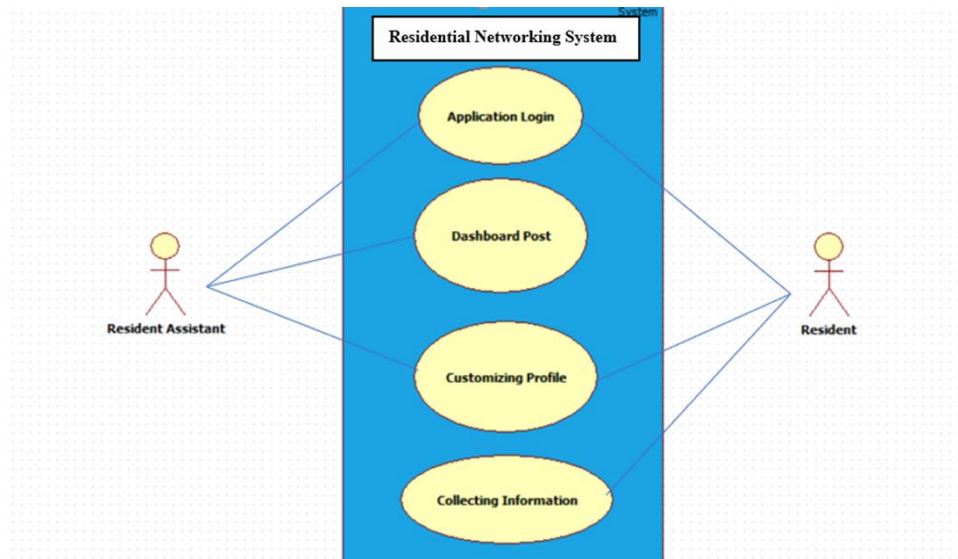
Use Case: 4

- **Use Case Names (Brief and Descriptive)**
 - Collecting Information
- **Unique Identifier**
 - RA- 4
- **Brief Description**
 - The user (housing residents) will be able to response the post posted by the housing staff.
- **Pre-Conditions**
 - There should be a recently posted flyer an open survey or poll to be able to respond. Once the housing staff has published a post then the residents should receive a notification to respond accordingly.
- **Post-Conditions**
 - The respective post will be marked as ‘responded’ with a timestamp that will be visible to the specific user. The information inputted has been recorded and will be displayed in the form of a graph.
- **Basic Flow / Course of Action (Sunny Day Scenario)**
 - 1. A notification appears on user’s mobile device
 - 2. Users click will click the notification
 - 3. The system will navigate the user to the post they’re allowed to respond with an answer.
 - 4. The user are able to click the post
 - 5. Users input their answer
 - 6. The users click the submit button
 - 7. A thank you message pops up.
- **Alternate Flows**
 - 1. The user are able to scroll though added post in the homepage
 - 2. The user are able to click the post
 - 3. Users input their answer
 - 4. The users click the submit button
 - 5. A thank you message pops up.

Other

- **Actors (Roles, Not Real People, With Brief, Descriptive Names)**
 - Resident Assistants
 - Residents
- **Goals**
 - It will allow Resident Assistant to collect information easily from their residents .

Use Case Diagram



3.1 Functions

This section includes the requirements that specify all the fundamental actions of the software system



Login

This allows user to login their account in order to access the features of the application. The users need to have a Florida Gulf Coast

University email and create a password that is at least eight characters long.

The user are also able to change their password when they need to update it. The user are also able to create a new password if they forgot their previous passwords.



Dashboard Page

This screen is also known as the homepage where the dashboard is located. This is where the user is able to upload post to display to all users or those users that are specified.

In this page users are able to see post posted by users. The users are able to share, like and save each post in the dashboard,

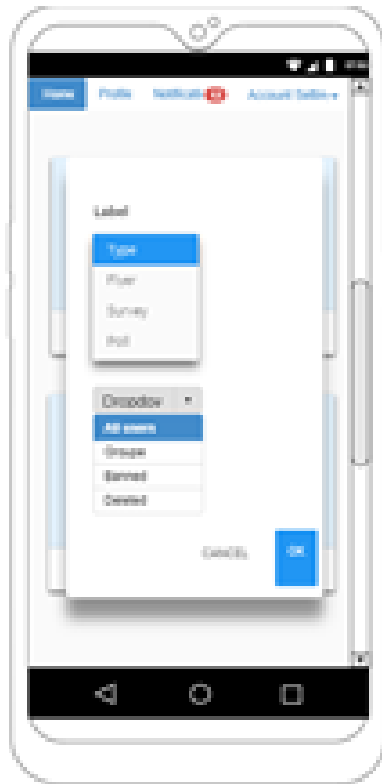


Profile Management

In the software application users shall be able to manage their profile. The profile consists of a section for a picture, biography, academics and other information users would like to share at their own discretion.

Within the profile page users have the ability to link special interest or hobby information to their profile. Another function in this page is that users would be able to set up their own calendar to keep track

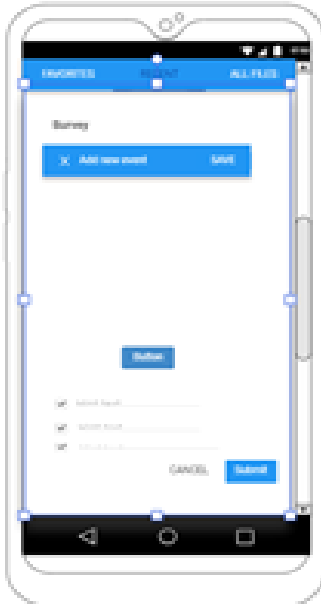
of classes, events and activities the user will participate.



Posting of Information

The user shall have option in the ways they would want to share their information. The options available to the user in the posting features is dependent on the user credentials.

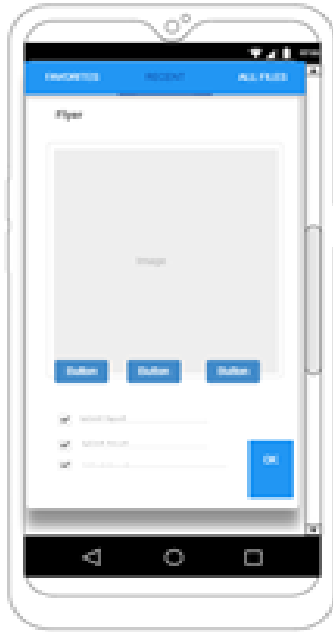
The options include texts, images, videos, flyers, polls and surveys. Specifically, the polls, surveys and flyers are also able to collect information from users aside from sharing information.



Survey

This feature allows users (Residential Assistant) to formulate up to 10 questions. The users shall have the option to create a multiple choice answers or textbook reply options for the receiver of the survey.

Once the survey is complete by a user (residents) a check mark shall be place near the survey post which indicates to the users that they have completed the survey.



Flyer

The feature of flyers has an important function to users. The flyers allows users to share information about events and activities going on in the residential halls. The flyer feature also allows users if they are planning to attend, cannot make it or simply are not sure.

Once the user select that they plan to attend an event then the specific event is booked in their personal calendar located in there profile page.



Analysis Report

Users specifically, Residential Assistants, shall be able to view all the replies to the survey, flyers and poll in the Analysis Report page.

This report provide the direct answers given by other user but, also provide the option of showing all the data gathered in the form of a graph.

3.2 Performance requirements

The requirements in this section provide a detailed specification of the user interaction with the software and measurements placed on the system performance.

The software is to support around 1000 users at a time. As we do not anticipate all primary users using the software at once as the software should be able to support 4 pages/sec. The software is meant to be use during the school years particularly when residents are still apart of the residential hall housing system. The software shall be able to handle a multitude of information in large amounts. The type of information can be in the form of images, text and videos as they will be the primary information shared in the software. The response time of the software shall be no more then one second when the users are interacting with the software in any way. Also, information provide in the system when beginning to use the system should require an attention span of 10 seconds on the exact same place of the software.

ID: RA-17

TITLE: Usage

DESC: The user shall be able to access the system with a username and a password that contains at least eight characters

RAT: In order to allow user access to the system.

ID: RA-21

TITLE: Usage

DESC: Users shall be able to post text updates in the form of a question. Once the user selects the post button on the homepage the user will be able to start creating a post.

RAT: Allows users to ask the questions they need answered.

ID: RA-22

TITLE: Usage

DESC: Users shall be able to customize their default profile by adding further information to the text boxes display under the profile page.

RAT: Allows profile to be unique from one another

ID: RA-21

TITLE: Usage

DESC: Users shall be able to post text updates in the form of a question. Once the user selects the post button on the homepage the user will be able to start creating a post.

RAT: Allows users to ask the questions they need answered.

ID: RA-24

TITLE: Usage

DESC: Users shall be able to choose the following options that allows everybody, nobody or friend to be able to view the post that the user created. This option will be available to users after the post is being created but before the post is submitted.

RAT: It provide the user the option to decided who can view the users post

ID: RA-25

TITLE: Usage

DESC: The users shall be able to post at most ten pictures at a time on the dashboard for each post.

RAT: This feature limits the number of picture that can be upload in a single post.

ID: RA-26

TITLE: Response Time

DESC: After submitting a post through the mobile device interface, it shall be available to other users' list of post within 30 seconds for 90% of the posts.

RAT: In order to allow user view new post in a timely manner.

ID: RA-27

TITLE: Response Time

DESC: An update to a user's list of posts shall appear in 3 seconds for 90% of the users

RAT: In order to allow user, view the new post posted.

ID: RA-28

TITLE: Usage of results of search

DESC: User should be able to search for other users' post, using the search bar as long as the user has authorization to access the software.

RAT: Users will be able to find other users that are in the system.

3.3 Usability requirements

Influence on Usability

Educational Experience: This system would be most helpful to first time college student because it is a social media that provides them with information about housing and the university.

General Experience: At the time university students have had the most experience with growing up with social networking applications like Facebook, SnapChat, Instagram and TikTok. Therefore learning how to use a new similar system may not be as difficult especially for those who constantly use social networking sites.

Disabilities: Seeing around the university and residence halls it is clear that there are people who have physical disabilities like vision impairment, hearing loss and mobility limitations. All these different levels of usability have to be analyzed and carefully considered when developing the application.

Technical Expertise: The user of this system will have average technical skills in that they know how to do basic tasks like use a phone, tablet and computer to surf the web. Users would have an easier time learning the system as the system's technical layout will be similar to other social networking systems, but the purpose of the system differs.

Intended Group: University housing students and staff are the main intended users at this time.

Usability Requirements refers to non-functional requirements as it relates to how easy it must be to learn and efficient it must be for carrying out the tasks of users.

The system should be easy to use, to take into consideration all levels of technological expertise, from a novice to a user with experience. The software should also be efficient for the frequent

users, easy to remember for casual users. In order to accomplish this the user should understand the software and be satisfied with the software.

3.4 Interface requirements

This software system is independent. This software system doesn't interact with any other known software system in the Office of Housing and Residence life.

3.5 Logical database requirements

Specify the logical requirements for any information that is to be placed into a database, including:

- a) The type of information needed to be place in the database would be information about the residents such as their full names, information based on demographic , place of residency , year and other information (email) housing finds pertinent.
- b) The database will be used frequently as the database will have the residents school email as the primary key to be used to associate all other information that may be use in the residents account.
- c) Accessing capabilities would be only accessible by the high level staff of the Office of Housing and Residency Life specifically those who have access to the information that needs to be inputted in the database ahead of time.
- d) Data entities will consist of students , Residential Assistants and Residency Hall the relationship will be both a one to one relationship and well as one to many.

e) Integrity constraints , the data will have to be the most updated information that the Office of Housing and Residence Life has on file. Another aspect to ensure is that the students provide the correct information upon or before moving in to the hall.

f) Data retention requirements : The data is to be kept until the time comes that the students decide to move out of the residency hall this may be any time during or after the school year . Once the students have moved out of on campus living the data associated to the students should be deleted as it would no longer be needed .

3.6 Design constraints

Specify constraints on the system design imposed by external standards, regulatory requirements, or project limitations.

The design should be appropriate for an academic environment in which it would be good to use colors and style associated with the specific institution. The design need to make it so that everyone can easily navigate through the application, no matter physical limitations. The design would also be limited to fit appropriately so that the software can be easily used on a mobile device.

3.7 Software system attributes

Specify the required attributes of the software product. The list of examples:

a) Reliability – The system is reliable as long as there is a connection to the internet. Also when the system is not being overwhelm with too many users.

b) Availability -The system is a mobile application so it will be available to download on the app store and available to those who have authorization through their school email.

c) Security – The key would be to implement penetration throughout the development of the system. This would help to seek out possible threats and vulnerability in the systems. Also staff looking out possible misuse of the software by some users.

d) Maintainability – Is very important but as well it is costly especially for mobile application. The plan is to be being with monthly maintenance as the application will be new and consist of some bugs. Then it would turn into a yearly maintainability as the features use within the system are features that have been used in other applications.

e) Portability – The software system is specifically built to be integrated with mobile devices like phones and tablets.

3.8 Supporting information

Problem Statement

Resident Assistant (RA) are the one responsible for facilitating a welcoming community among the residents who live in on-campus housing. In order to accomplish this RAs must organize programs that are engaging, educational and overall diversified to allow for a large number of participants. Given that RAs are college students themselves it is difficult to coordinate a program from the planning to the execution stage because there are many steps involved with developing a successful program. According to RAs a program can take 2-4 weeks to plan as an idea must be established and approved by the Resident Director (RD), room that will be occupied must be reserved by the housing specialist, flyers to advertise must be printed out by Resident Team

Leader Assistant (RLTA) and supplies for the event must be obtained by the RAs with the help of other housing staff. Although the main problem according to the RAs is not the stress of planning a program it is more so planning the program that a high number of resident will be willing and able to show up to the ideal number of residents would be 30-50 residents but the expect number is usually 6-20 residents per program.

In order to provide a great residential experience to college student in an effective and organized manner. Florida Gulf Coast University Resident Assistants need a system that will allows them to go step by step through the plan processes, a way to connect with residents to promote there programs and one that allows RAs to keep track of attendance.

4. Verification

Demonstration- a qualitative exhibition of functional performance, use a set of test activities with system stimuli to show system/system element. Appropriate when specifications are given in statistical terms . Purpose of collecting evidence of success, steps to be follow and special resource needed

Test - An action by which the operability, supportability or performance capability of an item is quantitative verified when controlling conditions that are real.

Key	Summary	Verification Approach
<u>RA-28</u>	<u>User should be able to search for other users' posts ,in the search bar, who also have authorization to access the application.</u>	Demonstration
<u>RA-27</u>	<u>An update to a users list of posts shall appear in 3 seconds for 90% of the users</u>	Test
<u>RA-26</u>	<u>After submitting a post through the mobile device interface , it shall be available to appear to other users' lists of posts within 30 seconds for 90% of posts.</u>	Test

<u>RA-25</u>	<u>The users shall be able to post at most ten pictures at a time on the dashboard for each post.</u>	Demonstration
<u>RA-24</u>	<u>Users shall be able to choose if nobody, everyone or friends will be able to view their post before the user post</u>	Demonstration
<u>RA-23</u>	<u>The system shall allow users to upload one .jpeg type picture at a time to their profile to set as their profile picture.</u>	Test
<u>RA-22</u>	<u>Users shall be able to customize their default profile by adding further information to the text boxes displayed under the profile page.</u>	Demonstration
<u>RA-21</u>	<u>Users shall be able to post text updates in the form of a question. Once the user selects the post button on the homepage the user will be able to start creating post.</u>	Demonstration
<u>RA-20</u>	<u>The system shall block users form submitting an answer to post that are flyers, polls and surveys if they do not have the necessary credentials. poll</u>	Demonstration

<u>RA-19</u>	<u>The system shall block user from access to the flyer, poll and survey dashboard posting feature if they do not have the necessary credentials.</u>	Demonstration
<u>RA-18</u>	<u>The system shall block user from access to the analytical reports if they do not have the necessary credentials.</u>	Demonstration
<u>RA-17</u>	<u>The user shall be able to access the system with a username and password that contains at least eight characters.</u>	Demonstration

5. Appendices

5.1 Assumptions and dependencies

Not all residents will want to use the application as they may not care to be socially active

Residents at time may try to post inappropriate content.

Some residents and staff may have trouble navigating through the application

Notification may be turn off as users get annoyed with the constant ding if other users are posting content continuously, preventing important information from being received

Not every response in a survey or results of a poll will be 100% accurate

Updates to the software may occur yearly

5.2 Acronyms and abbreviations

RA- Resident Assistant

RLTA- Resident Leader Team Assistant

RD- Resident Director

DA- Desk Assistant

SDA-Senior Desk Assistant

PA- Program Assistant (Housing Specialist)

RA-On-call- Resident Assistant on-call

AOC- Administrator on-call

FYRE- First Year Residential Experience

S'MORE- Students Maximizing Our Residential Experience

FTIC-First Time in College

SoVi-South Village

OHRL- Office of Housing and Residential Life

NLV- North Lake Village

WLV- West Lake Village