

SW Engineering CSC648/848 Fall 2022
Gatormmunity
Team 7

Anthony Zhang (Team Lead),
azhang12@mail.sfsu.edu

Marwan Alnounou (Front End Lead)

Mohamed Sharif (Back End Lead)

Jose Lopez (GitHub Master)

Florian Cartozo

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History Table

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1. Executive Summary

Many are afraid of using Craigslist and other similar sites because of the danger associated with meeting up with a stranger, and because of the risk of being scammed. Hence, the need for Gatormmunity. Gatormmunity aims to create a safe environment where San Francisco State University's (SFSU's) students, alumni, faculty, and staff can exchange goods and services. Gatormmunity is also a tool for connecting with others in the university. SFSU has been criticized for its lacklustre community, and Gatormmunity aspires to revitalize it by providing its members with the tools to connect with their peers.

Gatormmunity will provide a safe environment for SFSU's community to trade and socialize in. Only people who are confirmed to be members of SFSU are allowed to partake in Gatormmunity, so Gatormmunity's users can feel safe knowing that they will not be dealing with a dangerous person. Furthermore, trades can take place on campus, giving further assurance to anyone buying or selling on Gatormmunity. The convenience of doing trades on campus cannot go unstated, as well. Those who were previously reluctant to part with their unneeded belongings due to fear can now start making money with Gatormmunity. To elaborate on the community aspect of Gatormmunity: Gatormmunity will have forums and chat rooms so that its users can make new friends and meet others with similar interests. Again, since every user is a verified SFSU attendee, there will be more honest interactions and less unsavoury behaviour between users.

What is special about Gatormmunity is that it is closed to everyone but SFSU attendees, similar to how Facebook started out. Having a closed community is crucial for Gatormmunity's mission: we are developing an application that makes selling one's belongings safe and accessible, as well as making a place where SFSU attendees can connect with others from the university. By doing away with anonymity, users will be heavily discouraged from being immoral or malicious. Another unique feature of Gatormmunity is that users can form groups, so people with similar interests can more easily talk to each other. The addition of forums and chat rooms is to make Gatormmunity a direct upgrade over existing buying and selling sites because they do not focus on the community aspect of buying and selling within one's community.

2. Main Use Cases

Key Categories of Users/Actors:

Katla (Marketplace Seller):

Characteristics and Skills:

- A student who has a lot of stuff to sell
- Prefers to sell items for cheap so she can offload her huge inventory quickly
- Web skills are not that great

Goals and Pain Points:

- Wants to make some money by selling her ample belongings
- She has had bad experiences on other selling websites because people kept scamming her.

Rachell (Marketplace Buyer, Marketplace Seller, and Approved User):

Characteristics and Skills:

- A compassionate Computer Science alumni
- Prefers to use their phone for browsing the web
- Great with technology

Goals and Pain Points:

- Wants to make some side income
- Wants to buy a new phone from an SFSU student rather than a store
- She could not find a good way to advertise her services to only SFSU students.
- She keeps getting spam emails and harassment whenever she advertises her services on other sites.

Jane (Marketplace Buyer):

Characteristics and Skills:

- A stingy and risk-averse student
- Can find her way around most websites without difficulty

Goals and Pain Points:

- Wants to buy a laptop for cheap
- She is afraid of meeting up with potentially dangerous people, yet she really wants to save money by buying locally.
- She hates websites that make it hard for her to find what she is looking for. She loves websites that have a search and filter functionality.

Haruhi (Group Administrator):

Characteristics and Skills:

- An ambitious student who is president of the chess club
- Excited to meet new potential chess club members
- An expert with websites

Goals and Pain Points:

- Wants to expand her chess club and make it more active
- She wants to promote her chess club but people keep taking down her flyers that she places around campus.

Victor (Group Member and Approved User):

Characteristics and Skills:

- A student who loves chess
- Unfamiliar with Macs, but had to buy a Mac laptop for his classes
- Not great at navigating websites

Goals and Pain Points:

- Wants to play chess with their club members
- Wants to get help with opening a file on his Mac laptop
- He needs urgent help with his laptop but finding someone online to help him would take too long, and he wants someone else to fix his problem for him because he is not good with Macs.

Ficus (Approved User)

Characteristics and Skills:

- A student on the verge of failing their Computer Science classes
- Would never cheat to pass their classes
- Not great at navigating websites

Goals and Pain Points:

- Wants to find someone to help him understand his course material
- When he tried to find people to help him online, they just gave him the solutions to his questions without explanations, which is not what he wanted. He wanted help understanding the material.

Judie (Approved User):

Characteristics and Skills:

- A senior student in Mechanical Engineering
- Does not have much money
- Loves trains
- High GPA with good technical and social skills

Goals and Pain Points:

- Wants to network and find a job
- When she uploaded her resume online, she received a lot of spam calls and fake job offers.

Keith (Approved User):

Characteristics and Skills:

- A Civil Engineering professor who likes to help their students
- Used to work as a Senior Civil Engineer and knows a lot of people
- Good with technology

Goals and Pain Points:

- Wants to message all of their students at once
- Canvas and iLearn only lets him message all of his students one class at a time.

Anna (Approved User):

Characteristics and Skills:

- A Russian student who loves to have many friends
- Is always on social media, including Gatorcommunity
- Familiar with Apple devices, especially their laptops

Goals and Pain Points:

- Wants to make even more friends
- She likes to talk in chat rooms and make posts in forums, but she does not feel comfortable knowing the whole world could be reading her messages.

Vladislav (Approved User):

Characteristics and Skills:

- A new Russian student at SFSU who is lonely because they have no friends yet
- Understanding
- A chess fanatic
- Can only use simple websites
- A fluent reader in English, but not a fluent speaker

Goals and Pain Points:

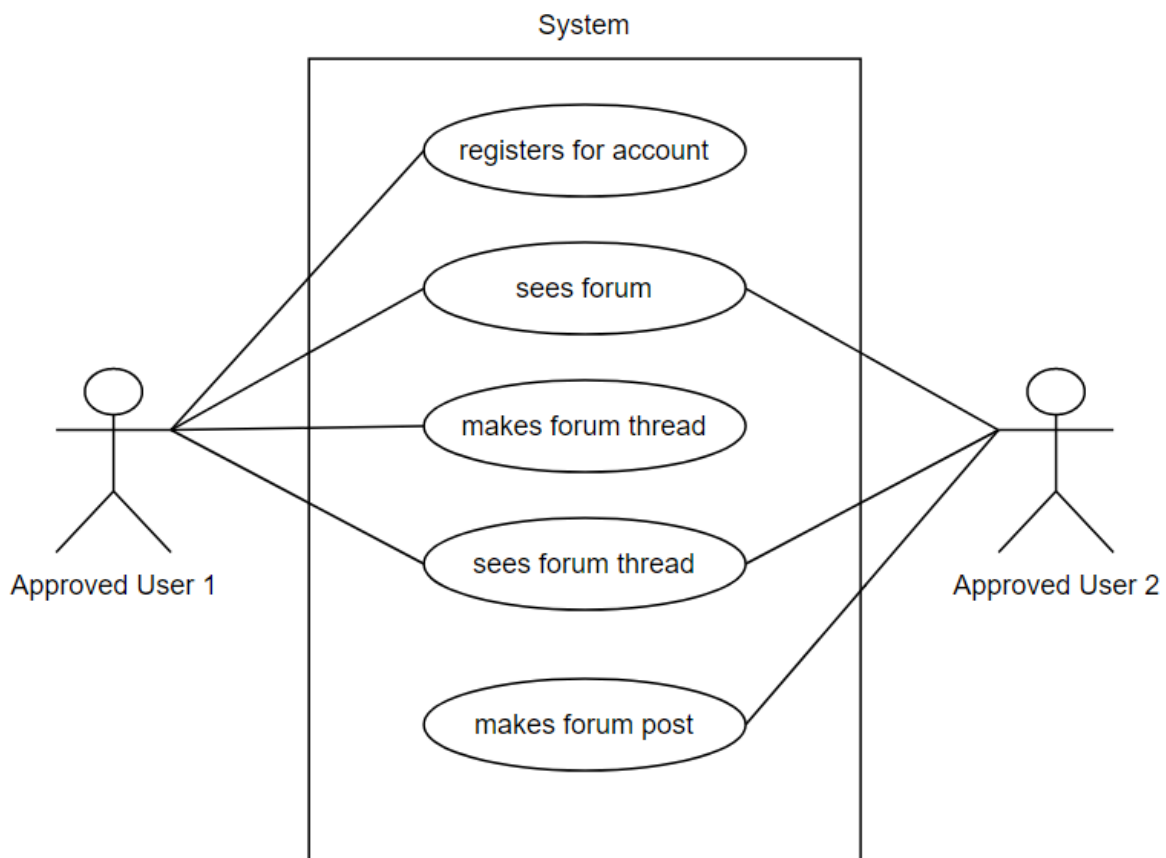
- Wants to make friends and meet fellow Russians at SFSU
- He does not know where the Russian SFSU students are and could not find any information online to help him with this very specific problem.

Main Use Cases:

1. Use Case: Russian Friends

Actors: Vladislav (Approved User 1), Anna (Approved User 2)

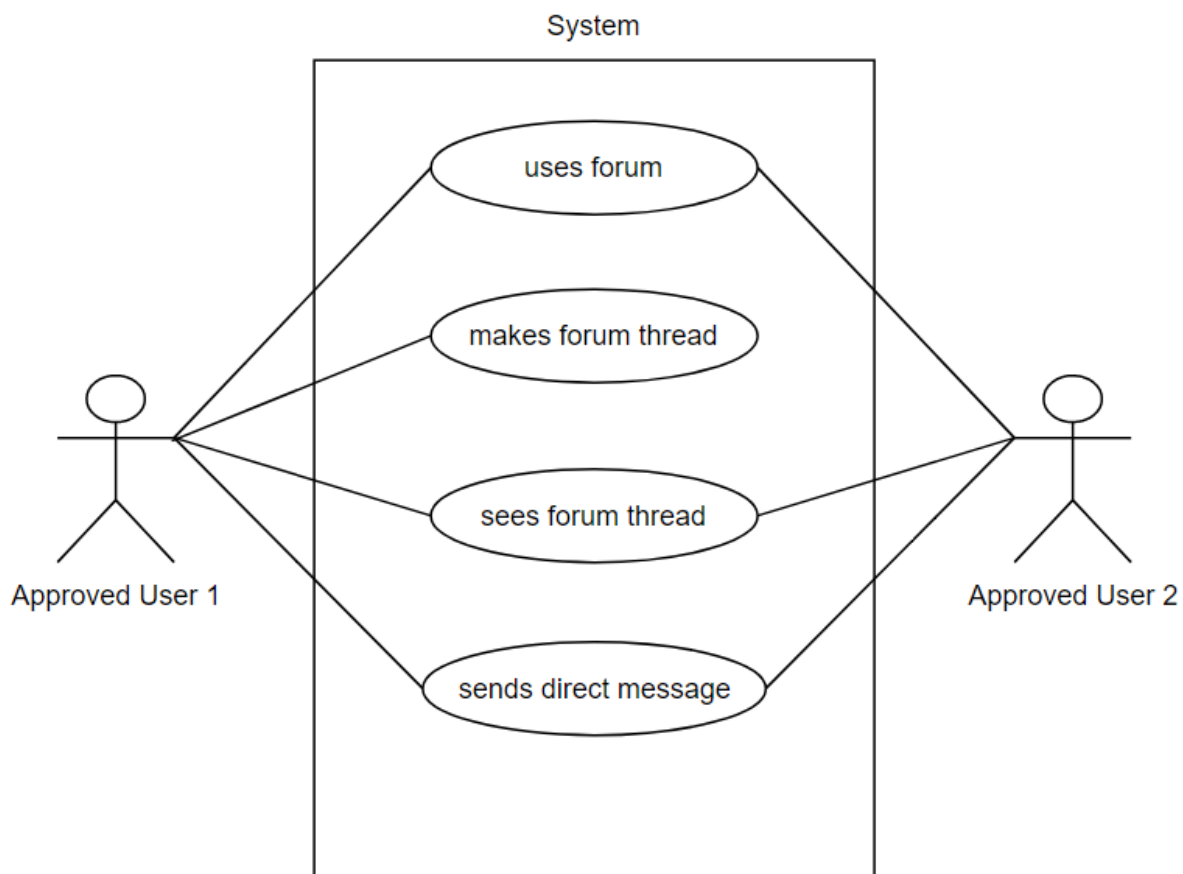
Description: Vladislav is a new student from Russia, so he has no friends and is lonely. He wants to befriend Russians, but he does not know how to find other Russians in SFSU. Luckily, he spots a Gatormmunity ad on campus, so he goes to make an account. Unfortunately, he does not yet have the SFSU identification required to register. He is disappointed but he understands why this requirement exists. He waits until his SFSU identification arrives and finally registers. Vladislav easily finds the Gatormmunity forum and just as easily makes a forum thread saying that he is looking for Russian friends. Anna, who is Russian, sees his thread and offers her friendship in her reply post. Vladislav is elated and becomes fast friends with her. Now, Vladislav is not so lonely anymore, while Anna, who is already popular, has just become even more popular.



2. Use Case: Struggling Student

Actors: Ficus (Approved User 1), Rachell (Approved User 2)

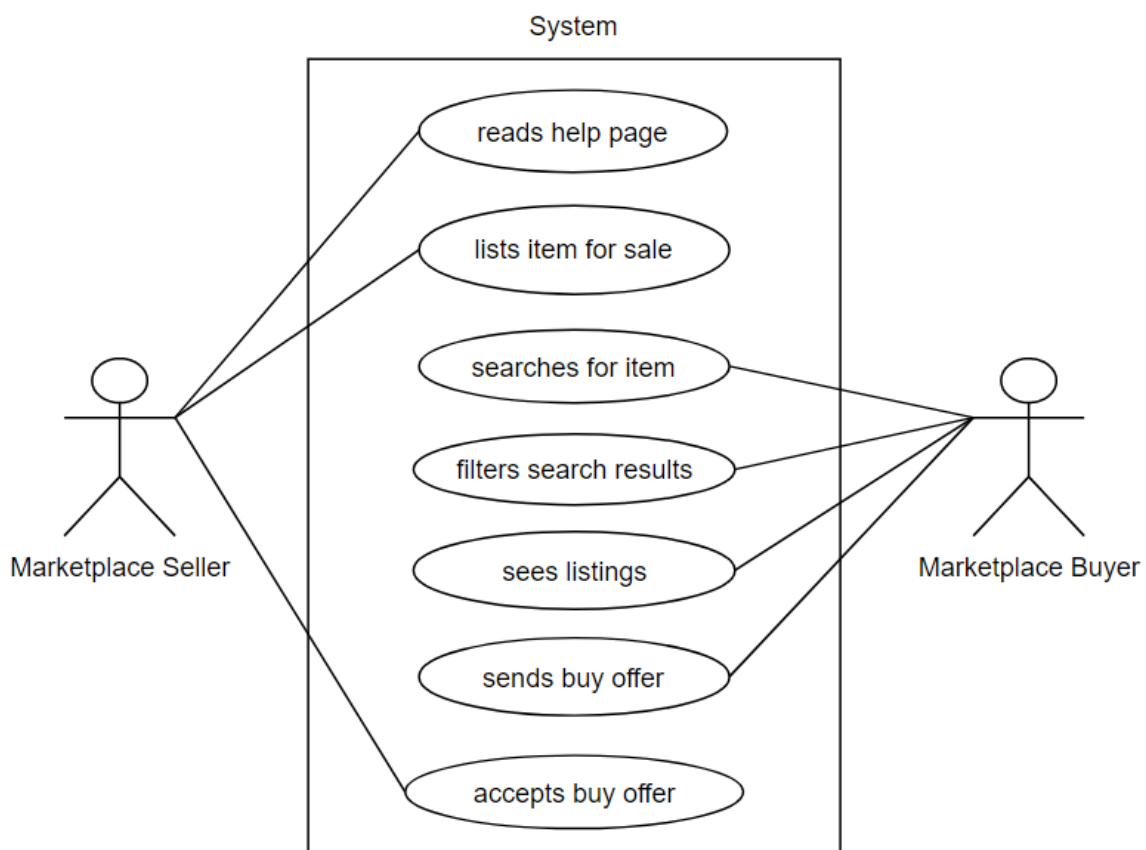
Description: Ficus is sad because he needs help understanding the material in his computer science class, and he is not able to attend office hours with his professor nor does SFSU's tutoring have anyone that can help him with the topic he is struggling with. Ficus does not want to spend money on paid tutoring, so he uses Gatorcommunity's free forum and makes a thread stating his circumstances. Rachell, a Computer Science alumni, sees his thread and pities Ficus, so she messages him, offering him a tutoring session free of charge. Ficus happily accepts, so Rachell tutors him over the internet. Ficus finally understands the material and is hopeful that he will pass his classes now. Rachell is thankful that she could help an SFSU student.



3. Use Case: Wary Traders

Actors: Katla (Marketplace Seller), Jane (Marketplace Buyer)

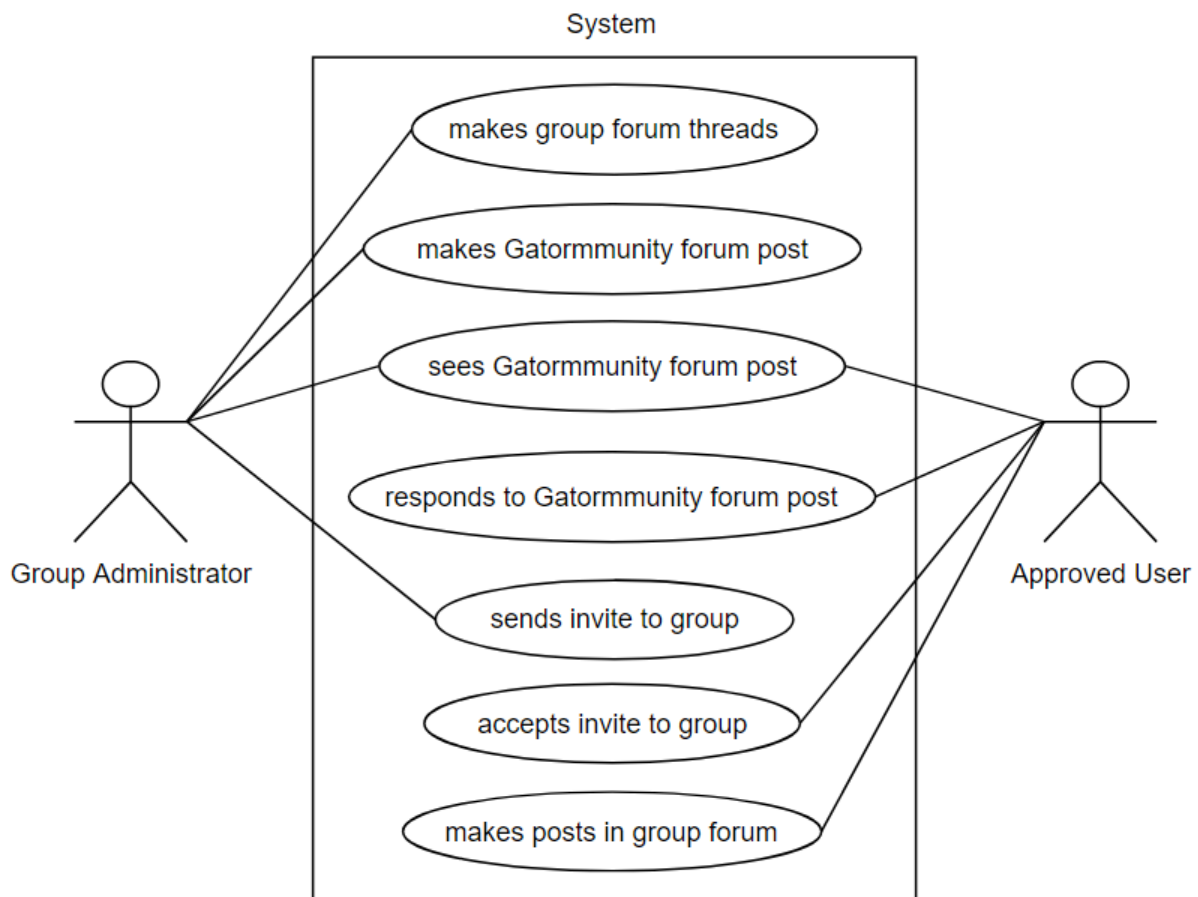
Description: Katla wants to make some money by selling stuff, but she is hesitant to sell online because people keep scamming her. When she heard about Gatormmunity she was elated because every user is a verified SFSU attendee and would not risk doing anything malicious. Katla initially could not figure out how to sell things on Gatormmunity, but after reading its help page, she was able to list her old laptop for sale. Jane, an SFSU student, wants to buy a laptop for cheap, so she uses Gatormmunity instead of its competitors because she does not want to risk getting robbed when meeting the seller. She searches for a laptop in the marketplace and filters the results so that she only sees listings that fit her budget. Only Katla's listing remained, so Jane sends her an offer and they agree to make the trade on campus since they both feel safe there. Jane is happy she got an inexpensive laptop, while Katla is happy she made some money.



4. Use Case: Inactive Chess Club

Actors: Haruhi (Group Administrator), Vladislav (Approved User)

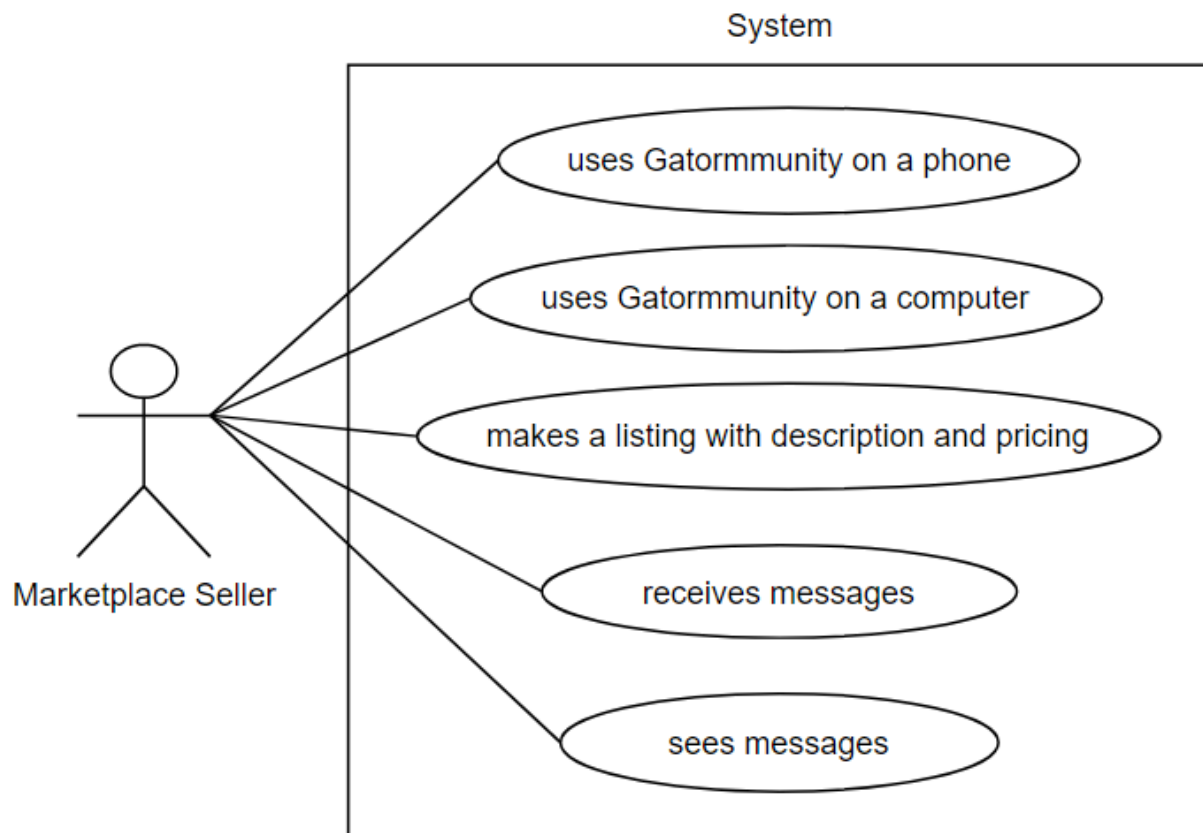
Description: Haruhi is trying to make her Gatorcommunity chess group more active but is not having much luck despite making weekly forum threads encouraging discussion in her group's forum. Haruhi figured she just needed more members so she made a Gatorcommunity forum post. Vladislav, a new student who wants to make friends, saw Haruhi's post and asked to join because he loves chess. Haruhi gladly accepted and invited Vladislav to the chess group. Vladislav immediately started posting in the group's forum because he has a lot to talk about when it comes to chess. Vladislav is glad to have found people with similar interests, while Haruhi is pleased her chess group has become more active.



5. Use Case: Tired of Spam

Actors: Rachell (Marketplace Seller)

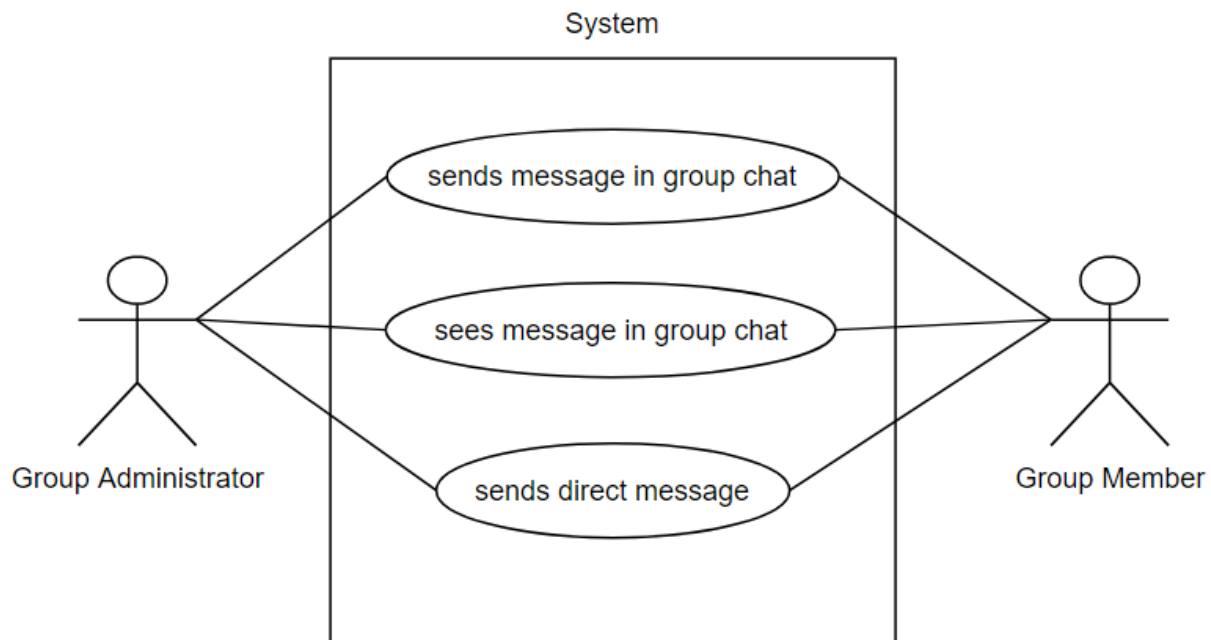
Description: Rachell is a Computer Science graduate who wants to make some cash by tutoring struggling computer science students. She has tried Gatormmunity's competitors before but it always resulted in her email being filled with spam and harassment. She did not try Gatormmunity first because it has a smaller user base, but the time has finally come. She was disappointed with how bad Gatormmunity looked on her phone, but she really wanted to help people from her alma mater. She bit the bullet and used her computer to make a listing describing her services and pricing on the marketplace. Soon, she was inundated with messages from students who wanted to pay for her services, and received no spam at all. Rachell loved seeing all of these potential clients and not a drop of spam or offensive messages.



6. Use Case: A Game of Chess

Actors: Haruhi (Group Administrator), Victor (Group Member)

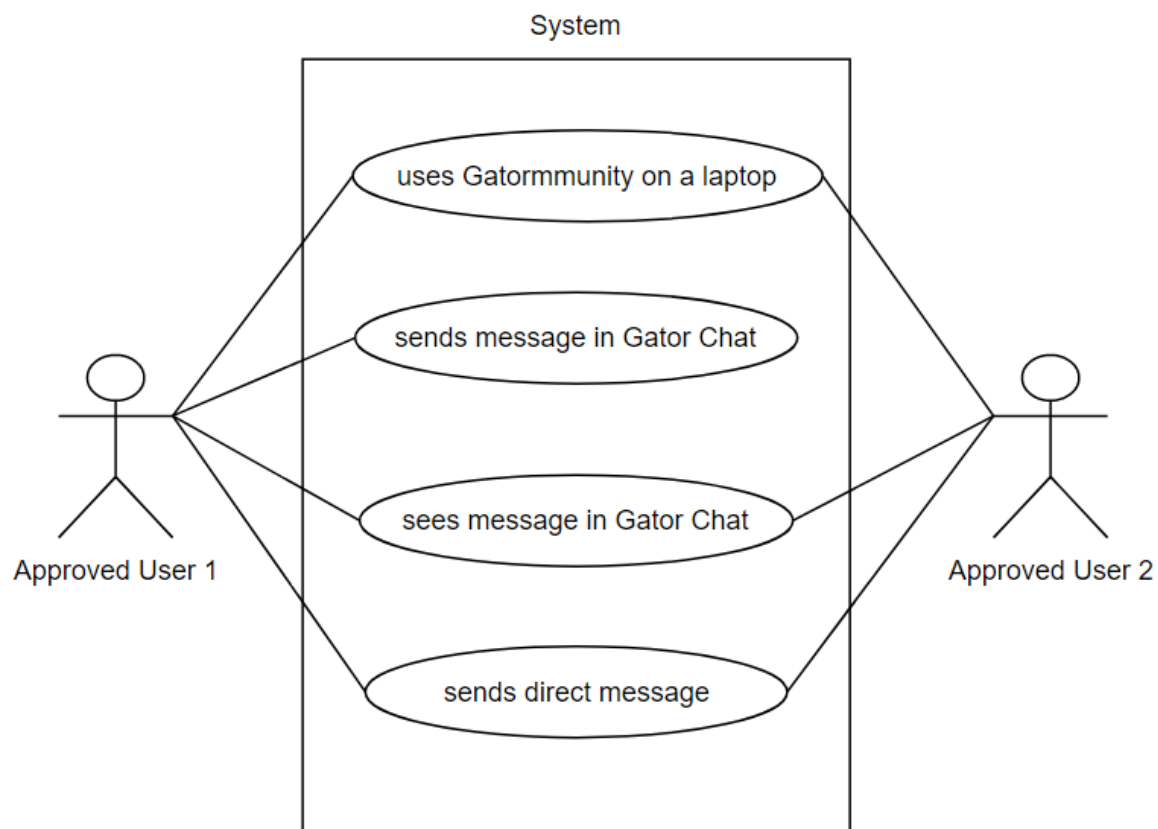
Description: Victor is bored and wants to play some online chess with his Gatorcommunity chess group, so he sends a message in their group's chat asking if anybody wants to play. The group chat is a chat room where only members of the group can send messages. He did not ask in the group forum because he wanted an immediate response from whomever is online. Haruhi happened to be online and saw Victor's request for a game, so she gladly accepted by responding to his offer in the group chat. After the game, they felt like reviewing the game they just played. They messaged each other to talk about it rather than use the group chat because they did not want everyone in the group to read the conversation about their private chess game. Victor is not bored anymore; Haruhi is happy to have bonded with her group members.



7. Use Case: Powerpoint Problems

Actors: Victor (Approved User 1), Anna (Approved User 2)

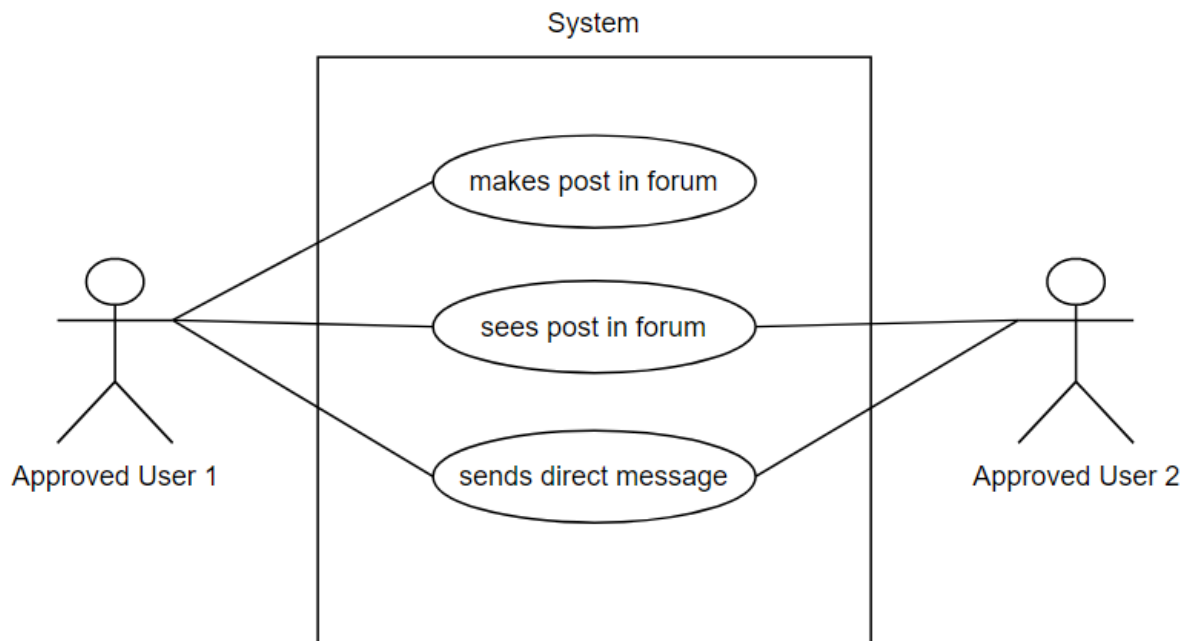
Description: Victor is on campus and he needs to open his powerpoint file for his class in an hour, but his Mac laptop refuses to open it. Victor starts to panic but remembers that he is a proud member of Gatormmunity. Even though he is not good with Macs, he at least knows how to use the web browser. He goes to Gatormmunity, and asks in Gator Chat if anyone is on campus that can help him with his dilemma. Anna, who is always on Gatormmunity via her laptop, sees the call for help and messages Victor saying she is on campus and can help him. They met up and she solved Victor's problem immediately owing to her expertise with Mac laptops. Victor is jubilant and promises to pay Anna back one day. Anna is satisfied enough to have made another friend.



8. Use Case: An Aimless Student

Actors: Judie (Approved User 1), Keith (Approved User 2)

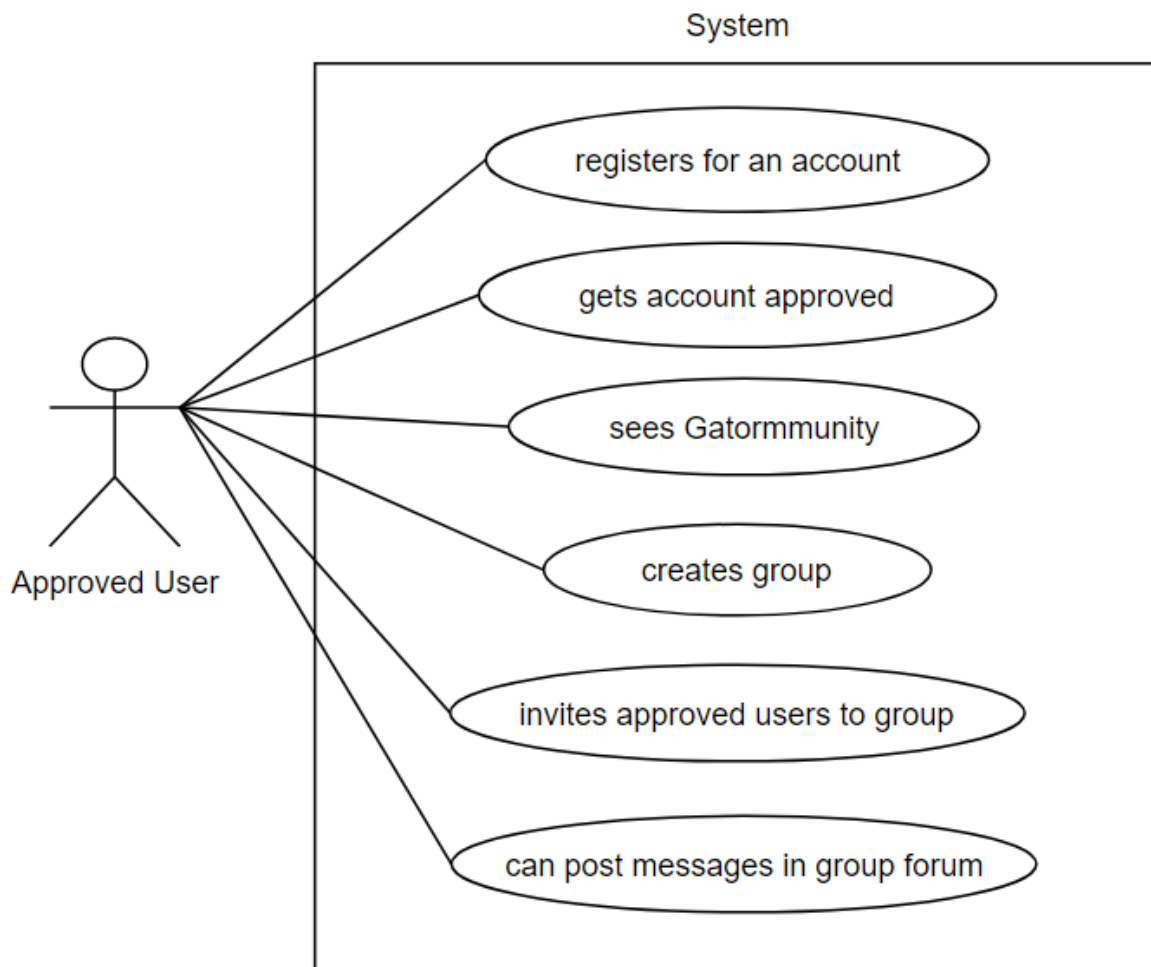
Description: Judie is in her last semester in Mechanical Engineering and is a hard worker with good grades, but she does not know how to apply for a job, nor has she thought about which company she wants to work for. All she knows is that she wants to work as soon as possible after graduation. Thus, she turned to Gatormmunity for help. She posted in the forum saying that she is looking for a job and listed her competencies and grades. Keith, a civil engineering professor and former senior engineer, saw her post and was impressed with Judie's skills. He sent her a direct message and told her he can get her an interview at BART since his friend works as the hiring manager there. Judie loves BART and is flabbergasted by Keith's offer. Naturally, she accepts. Keith is glad to have helped an SFSU student, and Judie is truly grateful for having chosen to post on Gatormmunity.



9. Use Case: A Professor's Pains

Actors: Keith (Approved User)

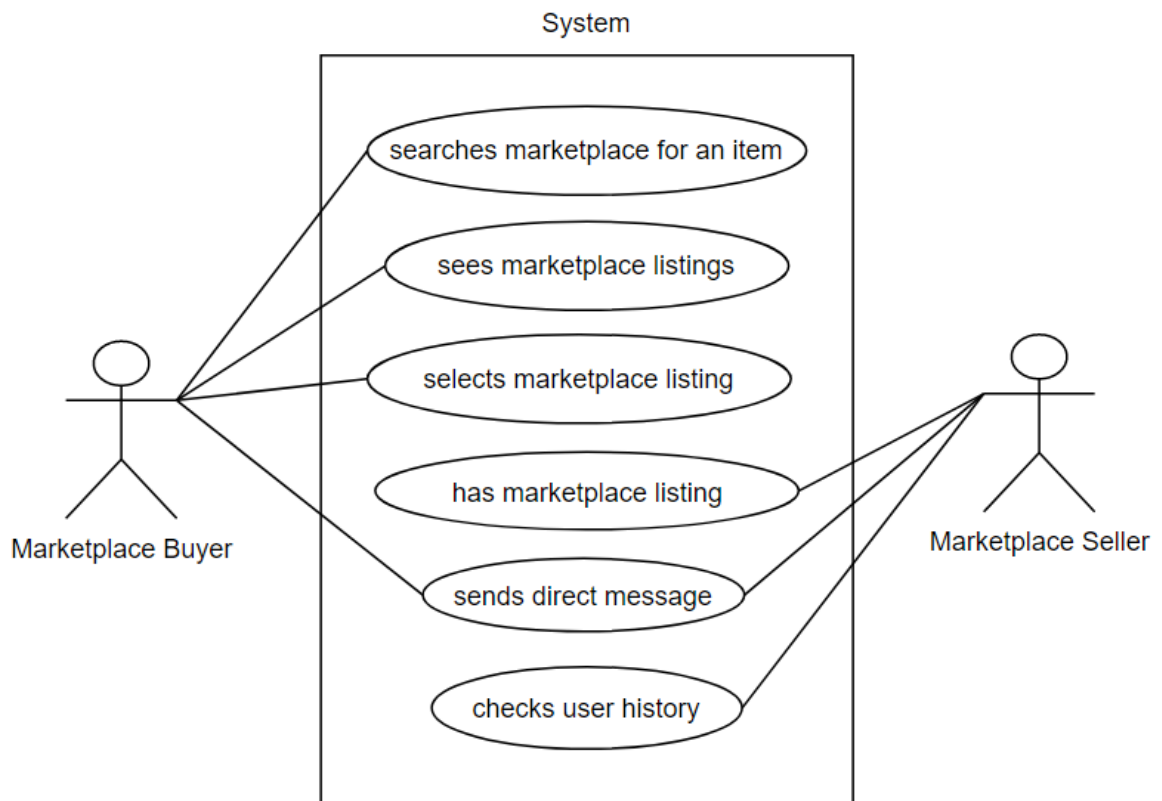
Description: Keith is a civil engineering professor who teaches 5 different classes this semester. He wants to make announcements to all of his students in all of his classes at once, instead of having to painstakingly make a separate announcement for each class. A colleague tells him about Gatormmunity and how people can create groups where members can post messages in the forum for everyone in the group to see. Keith signs up right away. After his account was approved, he saw how clean and quick Gatormmunity's pages were and wanted to tell his students all about Gatormmunity. He created a group and invited all of his students to it. Finally, he could post an announcement on a single page for all of his students to see. Thus, Keith's problems were solved and he was a happy man.



10. Use Case: Supporting the Students

Actors: Rachell (Marketplace Buyer), Katla (Marketplace Seller)

Description: Rachell needs a new phone but she does not want to buy it from a store. She wants to help her alma mater out by buying from its students. She knows the best way to buy from SFSU students is through Gatormmunity, so she searches the marketplace for new phones and picks the first one, which happens to be Katla's listing. Rachell messages Katla saying that she would like to buy the phone and have it shipped instead of picking it up in person. Katla checks Rachell's long Gatormmunity history and believes she is trustworthy, therefore she agrees to mail it to her. Katla is jubilant that she can make money, while Rachell is delighted that she got a new phone and helped an SFSU student.



3. List of Main Data Items and Entities

Types of Users and their Privileges:

All Users / Users: This category includes everyone who visits Gatormmunity's website, whether they have an approved account or not.

Guest User: A person that does not have an account. Has no access to almost everything in Gatormmunity.

Unapproved User: A person that registered for an account and has not yet had their account approved. Has the same privileges as a Guest User.

Approved User: A person that registered for an account and has had their account approved. Has access to almost everything in Gatormmunity, except for moderation tools and group-exclusive features.

Group Member: An approved user who is a member of a group. Has the same privileges as an Approved User, and has access to group-exclusive features.

Group Moderator / Group Mod: An approved user who is a moderator of a group. Has more privileges than a group member, including access to group moderation tools.

Group Administrator / Group Admin: An approved user who is an administrator of a group. Has more privileges than a group moderator, and has access to group administrative tools, including the management of group moderators.

Moderator / Mod: An approved user that has moderation powers in Gatormmunity. Has more privileges than an approved user, including access to moderation tools.

Administrator / Admin: An approved user who has access to Gatormmunity's server, database, and GitHub repository. Has more privileges than a moderator, including the management of moderators.

Main Terms:

Gatormmunity Forum / Forum: A forum where all approved users can start their own forum threads and make posts in existing threads.

Forum Category: The forum will have categories so that approved users can find others with similar interests.

Forum Thread / Thread: A collection of posts. Threads have a subject which is determined by the thread starter. Forum threads are comparable to discussion topics on iLearn, which other students can reply to.

Forum Post / Post: A message that approved users can post in a thread. The first post that starts a thread is also considered a post, and is referred to as the “original post”. Forum posts are comparable to the replies in a discussion topic on iLearn, including the post that started the discussion topic.

Pin: A pinned forum thread will always appear first in a list of threads.

Bookmark: Approved users can bookmark forum threads, which saves the thread into the user’s bookmarks. Bookmarks exist to help the user easily find threads that they want to go back to in the future.

Gatormmunity Marketplace: A place within the application where approved users can buy and sell goods and services.

Marketplace Buyer / Buyer: An approved user who is buying something from Gatormmunity’s marketplace.

Marketplace Seller / Seller: An approved user who is selling something on Gatormmunity’s marketplace.

Marketplace Listing / Listing: An item or service a seller is trying to sell on the marketplace. It can have photos, a description, a title, a price, and so on. The listing will not need to be approved before being listed, but approved users can report listings and moderators can delete listings that break the rules.

Gator Chat: A chat room for all approved users of Gatormmunity. Approved users can send messages and receive messages from other approved users in the chat room.

Direct Message / DM: A private method of communication between two approved users.

User Groups / Groups: Approved users can form their own groups which come with exclusive features such as a group-exclusive chat and forum.

Group Chat: A chat room for all members of a group. All group members can send messages and receive messages from other group members in the group chat room.

4. Initial List of Functional Requirements

1. All Users

- 1.1. All users shall be able to donate money to the developers via PayPal. PayPal has a donate button that prompts the user to specify how much they want to donate, and that donation shall go to the developers.
- 1.2. All users shall be able to donate money to the developers via Venmo. The developers have a Venmo username that the user can direct their Venmo donation to.
- 1.3. All users shall be able to contact the developers.
- 1.4. All users shall be able to view the home page.
- 1.5. All users shall be able to view the registration page.
- 1.6. All users shall be able to view the login page.
- 1.7. All users shall be able to view the about page to learn about the application.

2. Guest User

- 2.1. A guest user shall be able to register for an account.

3. Approved User

- 3.1. An approved user shall be able to log in to their account.
- 3.2. An approved user shall be able to reset their password.
- 3.3. An approved user shall be able to change their password.
- 3.4. An approved user shall be able to delete their account.
- 3.5. An approved user shall be able to make a forum thread.
- 3.6. An approved user shall be able to make a forum post.
- 3.7. An approved user shall be able to attach images to their forum posts.
- 3.8. An approved user shall be able to attach images to their chat messages.
- 3.9. An approved user shall be able to sort forum threads.
- 3.10. An approved user shall be able to bookmark forum threads.
- 3.11. An approved user shall be able to like forum posts.
- 3.12. An approved user shall be able to report forum posts to a moderator.
- 3.13. An approved user shall be able to report other users to a moderator.
- 3.14. An approved user shall be able to block other users.
- 3.15. An approved user shall have a profile page.
- 3.16. An approved user shall be able to edit their own profile page.
- 3.17. An approved user shall be able to view the profile page of another approved user.
- 3.18. An approved user shall have a profile picture.
- 3.19. An approved user shall be able to change their profile picture.

- 3.20. An approved user shall be able to create a user group.
- 3.21. An approved user shall be able to join a user group.
- 3.22. An approved user shall be able to send direct messages to other approved users.
- 3.23. An approved user shall be able to receive direct messages from other approved users.
- 3.24. An approved user shall be able to send messages in Gator Chat.
- 3.25. An approved user shall be able to see marketplace listings in the marketplace.
- 3.26. An approved user shall be able to select marketplace listings in the marketplace.
- 3.27. An approved user shall be able to report marketplace listings to a moderator.
- 3.28. An approved user shall be able to compare different marketplace listings against each other.
- 3.29. An approved user shall be able to add items to a wishlist.
- 3.30. An approved user shall be able to buy items from the marketplace.
- 3.31. An approved user shall be able to sell items on the marketplace.
- 3.32. An approved user shall be able to edit the details of an item they are selling.
- 3.33. An approved user shall be able to upload pictures of an item they are selling.
- 3.34. An approved user who is selling an item shall be able to list their accepted payment methods.
- 3.35. An approved user who is selling an item shall be able to list their possible delivery methods.
- 3.36. An approved user who is selling an item shall be able to list their preferred contact methods.
- 3.37. An approved user who is selling an item shall be able to assign their listing to a category.
- 3.38. An approved user shall be able to leave feedback about the seller they purchased an item from.
- 3.39. An approved user shall be able to search for users.
- 3.40. An approved user shall be able to search for marketplace listings.
- 3.41. An approved user shall be able to search for forum posts.
- 3.42. An approved user shall be able to apply filters to their user search results.
- 3.43. An approved user shall be able to apply filters to their marketplace search results.
- 3.44. An approved user shall be able to apply filters to their forum post search results.

4. Moderator

- 4.1. A moderator shall be able to approve unapproved users.
- 4.2. A moderator shall be able to reject unapproved users.
- 4.3. A moderator shall be able to ban approved users from Gatormmunity.
- 4.4. A moderator shall be able to delete forum threads.
- 4.5. A moderator shall be able to delete forum posts.
- 4.6. A moderator shall be able to pin forum threads.
- 4.7. A moderator shall be able to delete messages in Gator Chat.
- 4.8. A moderator shall be able to delete listings in the marketplace.

5. Administrator

- 5.1. An administrator shall be able to appoint moderators.
- 5.2. An administrator shall be able to unappoint moderators.
- 5.3. An administrator shall be able to ban moderators from Gatormmunity.
- 5.4. An administrator shall be able to create new categories in the forum.
- 5.5. An administrator shall be able to delete categories in the forum.

6. Group Member

- 6.1. A group member shall be able to invite other approved users to their group.
- 6.2. A group member shall be able to leave their group.
- 6.3. A group member shall be able to create forum threads in their group's forum.
- 6.4. A group member shall be able to create forum posts in their group's forum.
- 6.5. A group member shall be able to send messages in their group's chat.

7. Group Moderator

- 7.1. A group moderator shall be able to kick group members from their group.
- 7.2. A group moderator shall be able to delete forum threads in their group's forum.
- 7.3. A group moderator shall be able to delete forum posts in their group's forum.
- 7.4. A group moderator shall be able to pin forum threads in their group's forum.
- 7.5. A group moderator shall be able to delete messages in their group's chat.

8. Group Administrator

- 8.1. A group administrator shall be able to appoint group moderators.
- 8.2. A group administrator shall be able to unappoint group moderators.
- 8.3. A group administrator shall be able to kick group moderators from the group.
- 8.4. A group administrator shall be able to resign their position as group administrator and give the position to another member of the group.
- 8.5. A group administrator shall be able to delete their group.
- 8.6. A group administrator shall be able to add a description about their group.
- 8.7. A group administrator shall be able to edit their group's description.
- 8.8. A group administrator shall be able to create new categories in their group's forum.
- 8.9. A group administrator shall be able to delete categories in their group's forum.

5. List of Non-Functional Requirements

1. System Requirements
 - 1.1. The AWS server's region shall be North California, United States.
 - 1.2. The database shall be stored on the AWS server.
2. Performance Requirements
 - 2.1. The application should be available for at least 23 hours a day.
 - 2.2. The application's homepage should load in at least 7 seconds.
 - 2.3. The application should be accessible from anywhere in the world.
3. Storage, Security, and Environmental Requirements
 - 3.1. The server's storage shall be a 30 GiB volume.
 - 3.2. The database shall be secured with a password.
 - 3.3. Passwords shall be hashed before being stored in the database. In other words, there shall be no plaintext passwords stored in the database.
4. Usability Requirements
 - 4.1. Guest users shall accept the privacy policy and terms of service before they can register for an account.
 - 4.2. Approved users should abide by the terms of service.
5. Marketing and Legal Requirements
 - 5.1. The application shall be known as Gatormmunity in its marketing.
 - 5.2. The application shall be known as Gatormmunity in its licensing.
 - 5.3. The application shall have a logo.
 - 5.4. The application shall have a privacy policy.
 - 5.5. The application shall have terms of service.
6. Content Requirements
 - 6.1. The application shall support the English language.
 - 6.2. The application shall support US Dollars as currency.
 - 6.3. Approved users shall only upload files less than or equal to 5 MB in size.
7. Privacy Requirements
 - 7.1. The application shall collect and store personal data from its users.
 - 7.2. The application shall use the personal data of its users for verifying their identity.
 - 7.3. The application shall store and use its users' credentials for logging them in.

- 7.4. The application shall not reveal any of a user's private data to any other user.

8. Compatibility Requirements

- 8.1. The application shall support the Windows 10, Windows 11, and macOS Monterey 12.5 and 12.6 operating systems.
- 8.2. The application shall support the Google Chrome 105, Microsoft Edge 105, and Safari 15.5 web browsers.
- 8.3. The application should not be designed for mobile devices.
- 8.4. The application should be designed for and work on laptops.
- 8.5. The application should be designed for and work on desktop computers.

9. Organizational Requirements

- 9.1. The AWS server should not incur any costs to the developers.
- 9.2. The developers should use semicolons in their JavaScript code.
- 9.3. The developers should use tabs in their code, and not spaces.
- 9.4. The developers should not have lines of code that exceed 130 characters in length.
- 9.5. The developers should document their code with comments.
- 9.6. The application's code should not be messy.
- 9.7. The application shall use working and tested code. In other words, faulty and untested code shall not be served from the remote server.
- 9.8. The master branch of the application's GitHub repository shall contain only working and tested code.
- 9.9. The documentation and technical reports shall have a table of contents.
- 9.10. The documentation and technical reports shall have page numbers.
- 9.11. The documentation and technical reports shall start each section on a new page.

6. Competitive Analysis

Gatormmunity's Competitors:

1. VarageSale (www.varagesale.com)
2. Craigslist (www.craigslist.org)
3. OfferUp (www.offerup.com)
4. eBay (www.ebay.com)
5. 5miles (www.5miles.com)

Important Features

Feature/ Company	VarageSale	Craigslist	OfferUp	eBay	5miles
Strengths	Emphasis on local community, has an item reservation feature, simple website	Many item categories, worldwide availability, quick and easy to use	Easy to use, simple design, has an app, services the entire US	Large variety of items, Has large user base, has buyer/seller protection	Easy to use, has a detailed FAQ and help page, has an app
Weaknesses	Trading limited to local community, has reputation of admin abuse	Many spammers and scams, hard to get listings noticed, overwhelming UI	Steep learning curve, misleading advertising, hard to find some information	Users cannot sell services, has scammers	Messy front page, website has limited functionality, full of scammers
Pricing	Entirely free, no fees on sales	Has fees on certain services ranging from \$3 to \$75	Sales fee of 12.9%, premium option adds 7.9% sales fee	Sales fee of 12.9%	Sales fee of 10%
Social Media	Facebook, Twitter	Facebook	Facebook, Twitter, Pinterest, YouTube promoters	Facebook, Twitter, TikTok	Blog posts, Facebook, Instagram, Twitter
Onboarding Experience	Easy and simple to use, has a help page	Easy to sign up and sell items, has a help and FAQ page	Hard to learn, some things are not intuitive, lack of instructions	Easy to use, intuitive steps, has a help page	Easy to learn, intuitive steps, has a help page

Competitive Features

Feature	VarageSale	Craigslist	OfferUp	eBay	5miles	Gatormmunity
Community Forum	-	+	-	+	+	+
Website-wide General Chat	-	-	-	-	-	++
Group Communication	-	-	-	-	-	++
Direct Messaging	+	+	+	+	+	+
User Safety Measures	+	-	+	+	-	++
Scam Listing Prevention	+	-	-	-	-	+

Legend:

- Feature does not exist

+ Feature exists

++ Feature is superior

Research Summary:

Gatormmunity fills a niche that no other competitor fills: it is a marketplace and social networking service for the SFSU community. Gatormmunity's main advantage is that it better ensures user safety. Every user will be a SFSU member, and there will be no anonymity, so users would not do anything that would get them reported to the university or the police. Furthermore, Gatormmunity's content will only be visible to its members, which stops outsiders from snooping on them. Unlike its competitors, Gatormmunity will have a website-wide general chat, meaning there will be a chat room where every member can send messages that will be seen by all members. There will also be group communication: users can create user groups and send messages or make forum posts that are only visible to the group's members. Gatormmunity's competitors have no such comparable feature. The community forum and direct messaging features will be just as good as its competitors' versions, though it will look cleaner. Finally, Gatormmunity has scam listing prevention because its users cannot create an anonymous account and post scams without consequence.

7. High-level System Architecture and Technologies Used

System Architecture and Technologies:

- Server Host: Amazon AWS t2.micro 1vCPU 1 GiB RAM
- Operating System: Ubuntu Server 22.04 LTS (HVM)
- Database: MySQL 8.0.30
- Web Server: NGINX 1.23.1
- Server-Side Language: JavaScript

Additional Technologies:

- JavaScript Runtime Environment: Node.js 18.8.0
- Back End Framework: Express.js 4.18.1
- Front End Library: React.js 18.2.0
- IDE: Visual Studio Code 1.71
- MySQL Workbench 8.0.30

Supported Web Browsers:

- Google Chrome 105
- Microsoft Edge 105
- Safari 15.5

8. Checklist

- Team found a time slot to meet outside of the class
DONE
- GitHub master chosen
DONE
- Team decided and agreed together on using the listed SW tools and deployment server
DONE
- Team ready and able to use the chosen back and front end frameworks and those who need to learn are working on learning and practicing
DONE
- Team lead ensured that all team members read the final M1 and agree/understand it before submission
DONE
- GitHub organized as discussed in class (e.g. master branch, development branch, folder for milestone documents etc.)
DONE

9. List of Team Contributions

List of Detailed Contributions Made by Each Team Member:

Anthony Zhang:

1. Assigned tasks with internal deadlines to the team
2. Sent email to Ortiz for tech stack approval
3. Set up GitHub for team SW development
4. Added server credentials to GitHub
5. Brainstormed ideas for the project
6. Launched AWS instance and installed some of our tech stack onto it
7. Uploaded team home page
8. Created template for the About Me page for the team
9. Uploaded his About Me page
10. Was editor for Checkpoint 1
11. Did Part 0 of Checkpoint 1: Title Page
12. Proposed ideas for the executive summary
13. Did Part 1 of Checkpoint 1: Executive Summary
14. Contributed to and did the editing for the use case actors
15. Contributed to 1 use case and did the editing for 9 other use cases
16. Made 10 use case diagrams
17. Did Part 3 of Checkpoint 1: List of Main Data Items and Entities
18. Contributed to the list of functional requirements
19. Contributed to the list of non-functional requirements
20. Researched the competitor 5miles
21. Contributed to the competitive analysis and wrote the research summary
22. Did Part 8 of Checkpoint 1: Checklist
23. Did Part 9.1 of Checkpoint 1: List of Team Contributions
24. Did Part 9.2 of Checkpoint 1: Email Ortiz
25. Active in Discord group and meetings, and facilitated discussion

Marwan Alnounou:

1. Brainstormed ideas for the project
2. Uploaded his About Me page
3. Proposed ideas for the executive summary
4. Made 3 use cases
5. Contributed to the list of functional requirements
6. Contributed to the list of non-functional requirements
7. Researched the competitor Craigslist
8. Contributed to the competitive analysis

9. Did Part 9.2 of Checkpoint 1: Email Ortiz

Mohamed Sharif:

1. Brainstormed ideas for the project
2. Installed and configured the tech stack on our AWS server
3. Uploaded his About Me page
4. Proposed ideas for the executive summary
5. Contributed to the use case actors
6. Contributed to the list of functional requirements
7. Contributed to the list of non-functional requirements
8. Researched the competitor OfferUp
9. Contributed to the competitive analysis
10. Did Part 7 of Checkpoint 1: High-level System Architecture and Technologies Used
11. Did Part 9.2 of Checkpoint 1: Email Ortiz
12. Active in Discord group and meetings, and facilitated discussion

Jose Lopez:

1. Uploaded his About Me page
2. Contributed to the use case actors
3. Made 3 use cases, and contributed to 1 other use case
4. Contributed to the list of functional requirements
5. Contributed to the list of non-functional requirements
6. Researched the competitor VarageSale
7. Contributed to the competitive analysis
8. Did Part 9.2 of Checkpoint 1: Email Ortiz
9. Active in meetings and facilitated discussion

Florian Cartozo:

1. Uploaded his About Me page
2. Contributed to the use case actors
3. Made 3 use cases
4. Contributed to the list of functional requirements
5. Contributed to the list of non-functional requirements
6. Researched the competitor eBay
7. Contributed to the competitive analysis

Contribution Scores:

Anthony Zhang: 9

Marwan Alnounou: 6

Mohamed Sharif: 9 (*I learned about Nginx and had React running on Nginx. I helped Marwan with Nginx. I Researched a lot on Offer Up. I gave the correct technical use of components and destructors for the homepage for a cleaner code. I contributed my opinion to the non functional and functional. I participated in every meeting and spoke in every meeting. I turned in all the work on time. I installed node and made updates on the server OS. I consulted with the team lead every time I submitted something and asked for feedback. I gave constructive feedback during meetings. I asked the team leader if he needed any help. In regards to the meetings, I was never told that it would be a problem to be on zoom while I'm picking my daughter from school 4 blocks away from my apartment. I was still able to actively participate.)*

Jose Lopez: 7.5

Florian Cartozo: 5