SW Engineering CSC648/848 FALL 2020

DoReMeet

Team 02

Milestone 1

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History Table

Version	Date	Comments
M1V2	10/11/2020	Submission updated with Feedback
M1V1	09/30/2020	Initial Submission

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1. Executive Summary

Our product, DoReMeet, aims to help artists build a community by providing them a platform where they can find collaborators, mentors, and/or friends. Artists, be it singers, dancers, painters, photographers or film makers, can use our product to find people that are close to their geographical location and connect with them, to work on projects for work, fun or both.

Our vision is to extend the practice of instinctual decision-making by breaking down complex entities into a simple matter of yes or no via swipes to forums other than dating. We live a fast paced life, where practically everything is available at the touch of a finger. However, there are few reliable platforms that directly offer this provision for finding fellow artists online. With DoReMeet, users will have the ability to find people either within a 100 miles (150 miles for premium account users) radius of their current location or set up a 'Meet Online Only' account. They can "like" individuals (thus marking an individual as *interested*) if they want to connect with the person or "pass" (marking the individual as *not interested)* if they don't think they'd be a right match.

The users, once registered, will be able to build their profile by adding photos, videos, links to their work, and a bio, which would be a little blurb about them, their work and what they are seeking on DoReMeet. Also, our product offers users' the ability to add labels/tags to highlight what they are looking for, and this helps deliver more targeted results by filtering the potential matches to those that align with the users' interests.
These tags break down the user base based on preferences, in terms of interaction criteria (meet in person or meet virtually), work type (passion project, professional work), skill level (novice, competent, experiences, expert), age, and art type (painting, dancing, music, photography, cinema). If the user also wants to emphasize anything in particular about what they are looking for (for instance if it is paid or unpaid work or if there is a timeline to the project) they can add custom tags on their profile. Once a user does find a match that they want to work with, they have the ability to interact with them via chat functionality, where they can share information, pictures and videos of their work. Honing in on the aim to build a community for artists, users can share the collaborations they do with people they meet on DoReMeet on its Community page and showcase their skills.

The source of income for DoReMeet will be advertisements. The advertising model is based on contextual advertising, which is considered to be the least intrusive form of advertising. When the website is opened, users will see small advertisements with keywords that are relevant to the ad underlined on a page. Visitors have the option of mousing over the word and clicking if they want to. We will integrate keywords into our content and based on the users' preference, they'll see more targeted ads. For instance, if someone is interested in music, violin in particular, they'd likely see ads from music stores that sell violins.
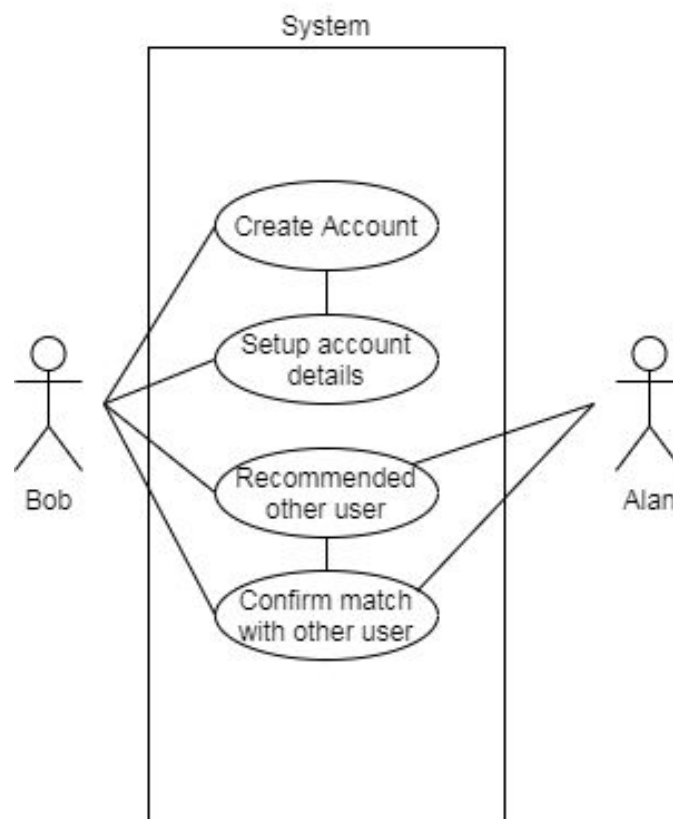
Additionally, to monetize the product we'd add certain paid features as a part of "Premium" membership. Members can choose to pay a small monthly feature to become Premium

members; with the regular membership the number of likes per day is limited to a 100, but premium members will have unlimited number of likes. With this membership, users' profiles will be highlighted, signifying that they are serious in their search, and they'll get an increased size limit of 120mb for their portfolio (as opposed to the regular 80mb). They'll also be able to extend their search radius for upto 150 miles, giving them access to a larger pool of potential matches. Additionally, they'll be able to 'Rewind' on potential matches, if they skipped someone by mistake and would like to actually connect with them. Premium members will not see any ads, and will have a very customized, streamlined and uninterrupted experience.
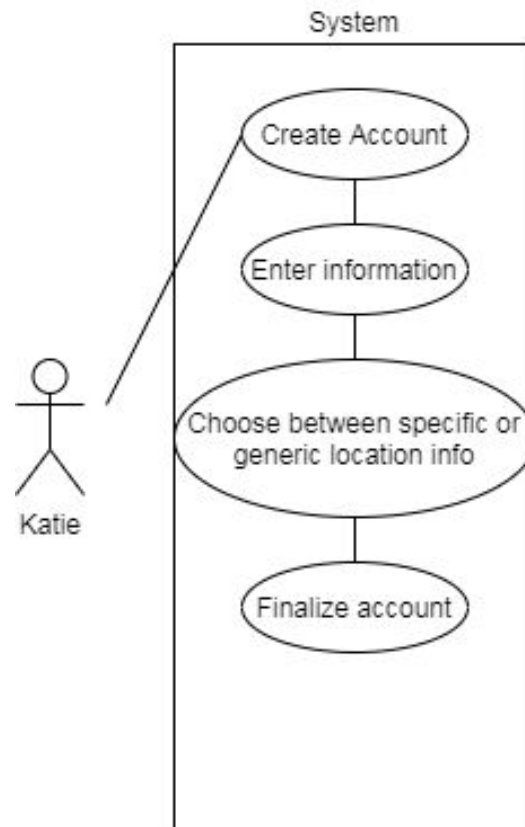
We are enhancing the model of connecting with other people by providing a platform geared towards artists that can not only be personalized based on their needs, but is also effective, safe, reliable, with a fun and creative touch to it. We will market our product based on these features and will appeal to the artist community by offering them a niche service. We will advertise our product on commonly used social media platforms like Facebook, Instagram, Snapchat and TikTok. Also, we'll use Google to advertise our website. In addition to advertising on these platforms, we'll advertise on university campuses by working with their Art, Visual Communications and Film departments, giving their students a platform to showcase their work and encourage collaborations. We'd also extend our platform to the general student body through student ambassadors, who through their own experience will be able to get their peers to join the platform. Our marketing strategies will target demographics between 15 - 25 year olds, and we'll leverage their experiences to build a product that can go "viral".
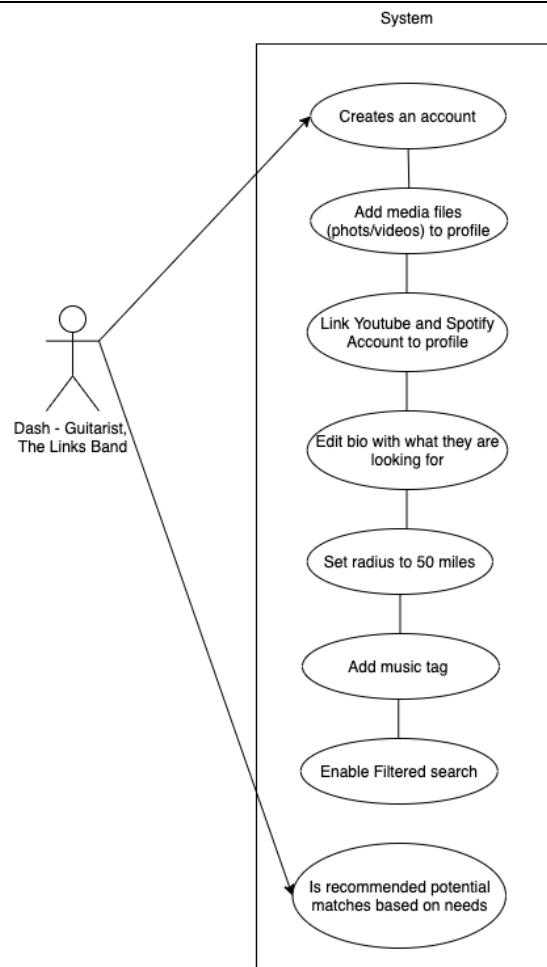
2. Main Use Cases

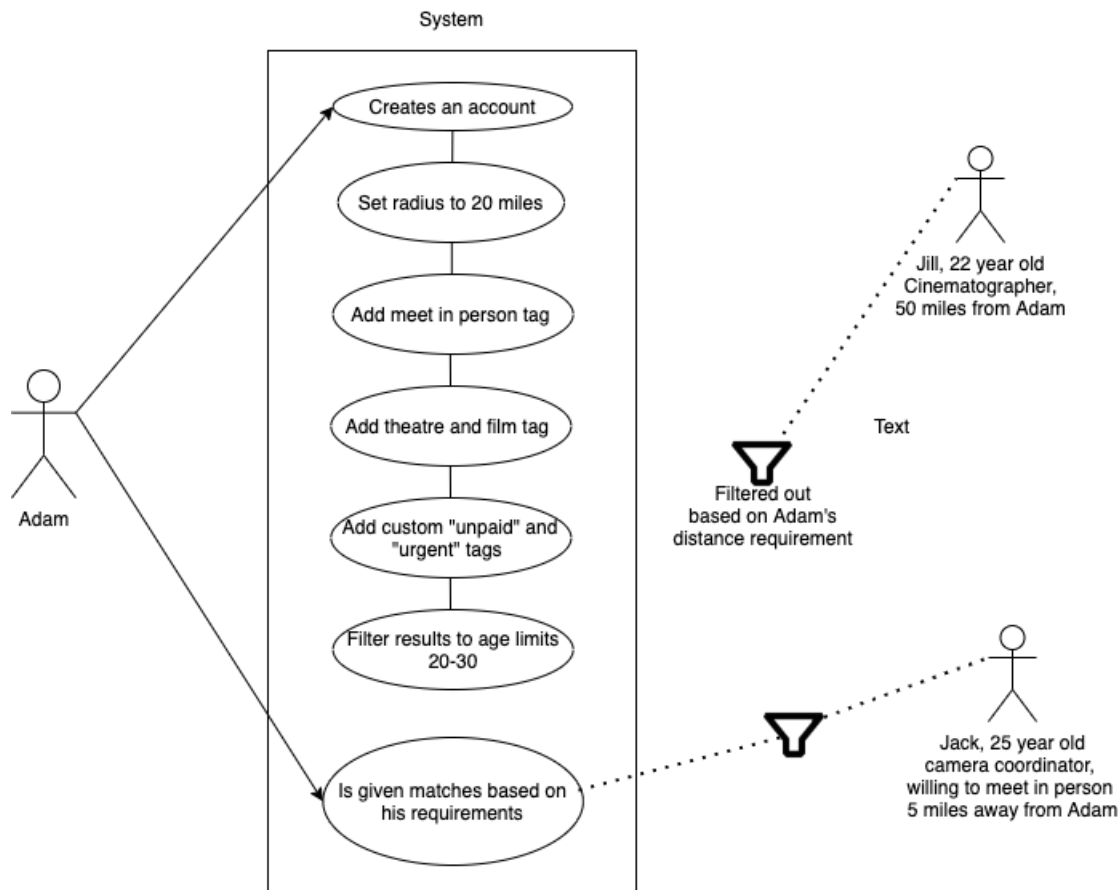| Use Case Title	Forming a duet
Actors	Bob (Tuba player) - Bob is a 70 year old retiree who has recently begun playing the tuba again in his free time. Bob used to play the tuba in highschool and is now rediscovering his passion for the instrument. Alan (Trumpet Player) - Alan is a university student who recently began learning to play the trumpet. The world of music is new and vast to him and he is looking for others to experience it with and maybe even help guide him.
Description	After practicing a bit Bob decides he wants to form a duet with a trumpet player. He begins by creating his account on the site and selecting that he is interested in music. He specifies that he plays the trumpet, and is looking for someone who plays the tuba. Once Bob has finalized his account details he sees several potential matches with similar interests who meet the requirement that he specified. Bob chooses to match with Alan and similarly Alan chooses to match with Bob. Given their mutual wish to match, they are both notified that they have matched with each other and are given the option to chat and exchange details.

Use Case Title	Unwanted account details - sharing location
Actors	Katie (Painter) - Katie is a young adult living on her own who has a strong interest in painting. She has been painting ever since she was a kid and loves to do so whenever she can find the time to.
Description	Recently Katie has been feeling the urge to do collaborative work with other painters so she decides to sign up for the site to meet new people. She begins the process of creating an account and everything is going smoothly until she gets to the part where she is prompted to enter her location details. Katie feels uncomfortable putting her location details onto the site and would instead prefer that this prompt be left blank. Possible solutions: Have a "meet online-only" category, Have a "general area or city/county category"

Use Case Title	Band Looking for Manager
Actors	The Links – A band of 4 musicians. Account made by Dash, the guitarist. The Links is an up and coming local rock band from the San Francisco Bay Area who have been doing shows randomly up until now. With the rising fame, they need help to organize their shows and more.
Description	With their rising popularity, the Links need a manager who can help them organize their shows, book more shows and help them build their brand. Given that they are still not as famous or rich, they want to use a free, yet reliable service that can help them find a band manager. They don't want to put the listing on Craigslist and at the same time, they feel that LinkedIn or Indeed will not be the right platform for them, and might not bring them the creative personalities that they are seeking. So they make an account on our website, and set up their profile, with pictures of the band members, photos from their shows, links to their YouTube videos and their Spotify. In their bio they list out what they are looking for, and a "job requirement" so to say for the role they are seeking to fill. They've chosen to restrict their matches to 50 miles, so they only see interested people who are close by and are familiar with the Bay Area. Also, they've set up filters so that they are seeing people who have an interest in music.

System

Dash - Guitarist, The Links Band

- Creates an account
- Add media files (phots/videos) to profile
- Link Youtube and Spotify Account to profile
- Edit bio with what they are looking for
- Set radius to 50 miles
- Add music tag
- Enable Filtered search
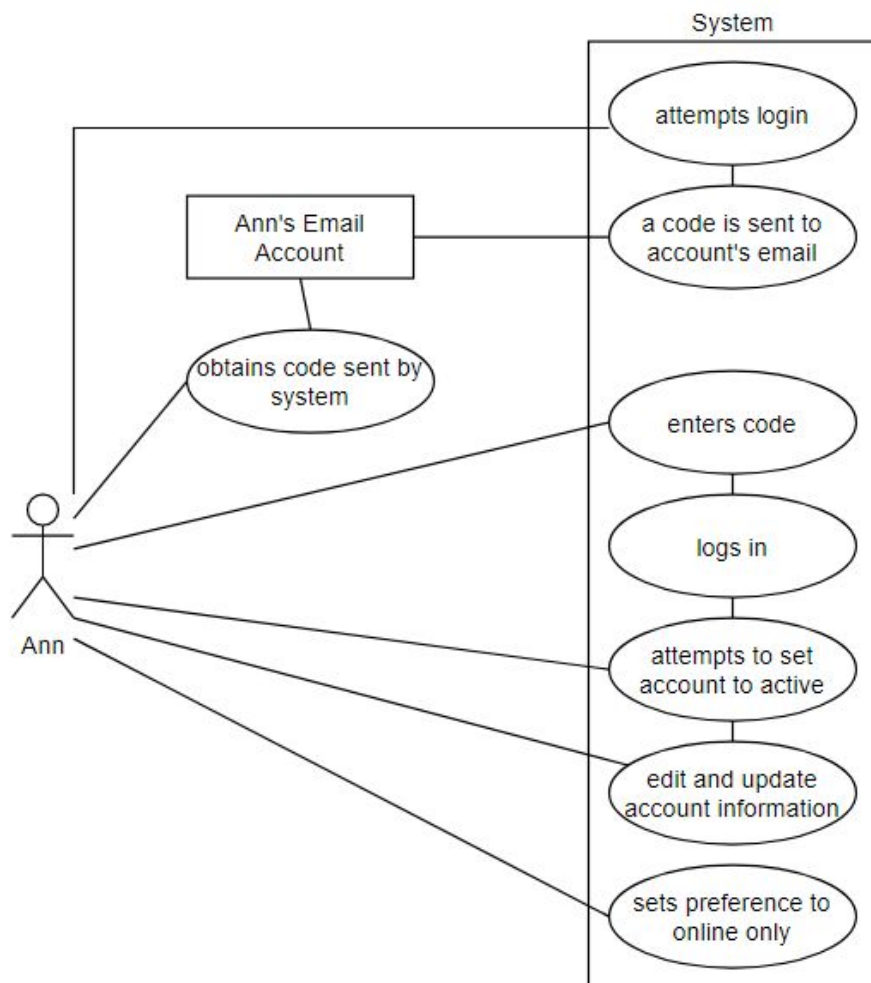- Is recommended potential matches based on needs

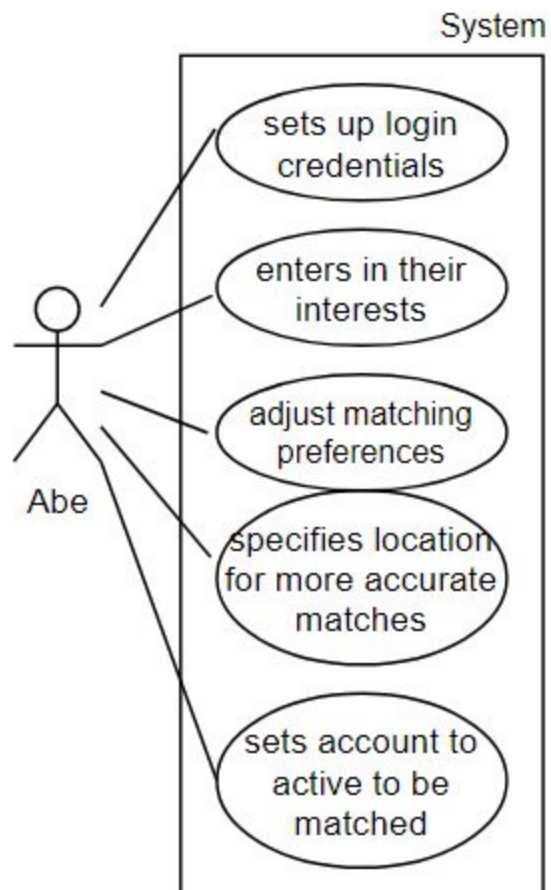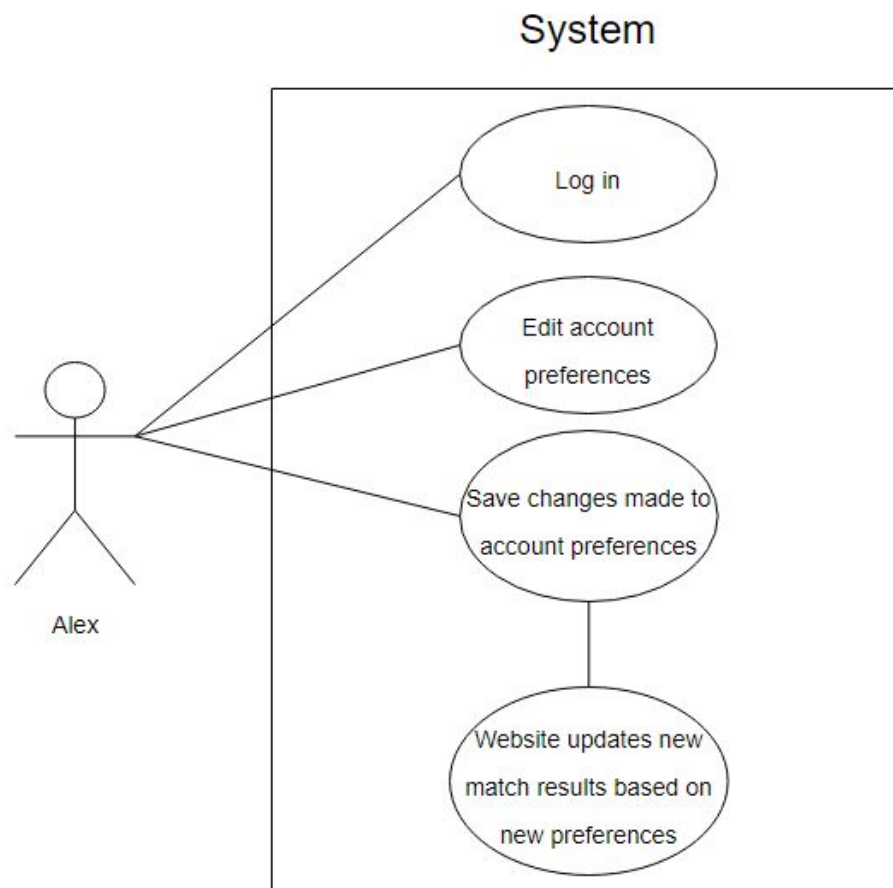| Use Case Title	Director looking to create movie for an Indie Film Festival
Actors	Adam, 22, a senior at SF State University's School of Cinema with a passion for filmmaking. Jack, 25, a freelance cinematographer living in San Francisco, with experience working on Indie films. Jill, 23, a cinematography intern at Oakland Theatre Project and part-time film school student at CSU, East Bay.
Description	Adam wants to submit a short film for a Los Angeles Indie Film Festival but he needs a whole crew, from cameramen, to actors, to script writers and editors. He wants to expand his network and hence didn't want to just make a posting in his university, so he chose to create an account on our website. This gives him access to a bigger film and theatre community and also will help expand his knowledge of the subject. He chose to find people within 20 miles of his university housing so they can all easily meet up and work together. Also, he added tags like "urgent" and "unpaid" so that the people he matches with understand that it is unpaid work and collaboration for just credits and potential success from there on. Additionally, Adam was able to set filters to only get people between the age of 20 - 30, because he wants to make the movie for a niche demographic. Adam sees Jack, who is open to meeting in person and is 5 miles away from him as a potential match. He doesn't however see another cinematographer Jill, who is based 50 miles away from his location, based on the filters he set up.

Use Case Title	Returning user
Actors	Ann, a returning registered user who found a new passion playing the bass.
Descriptions	Ann is a returning user. They enter their login credentials into the website. Ann is now given a prompt to enter a numeric code that was sent to their email. They successfully log into their account using the one-time use code and they set their account to active. Before doing that however, the website asked them to verify their current information and edit it as needed. Ann notices that there is an option to not share her location and opt for a meet online only setup. By doing so, Ann can now meet with other artists across the globe, who are not in close geographical vicinity. Also, Ann doesn't have to share information about their location, which makes her feel more secure.

Use Case Title	Account setup
Actors	Abe is an unregistered user looking to making an account, he is looking for other people to share his hobbies with
Descriptions	Abe is trying to find people in their local area that share the same hobbies/interests as them. They find our website that may be able to help them do so, and so make their account. They set their name, email, password, date-of-birth and current country. After this, Abe is now asked to set at least one tag for their account. They also find that they can turn on their location to see people in their area. With this, Abe can customize his search preferences even further. They can also customize their profile by adding a short bio. Abe has finished personalizing his account and sets his account to active.

Use Case Title	Updating preferences
Actors	Alex is a long time registered user and has collaborated with other users on the platform many times. He has been collaborating with Pop artists, however, he wants to start exploring different types of genres.
Descriptions	Alex logs into his existing account and changes his potential match preferences from Pop to Open to all music genres. After Alex saves the changes, the website gives Alex new users to match with who have similar preferences to Alex's new preferences.

System

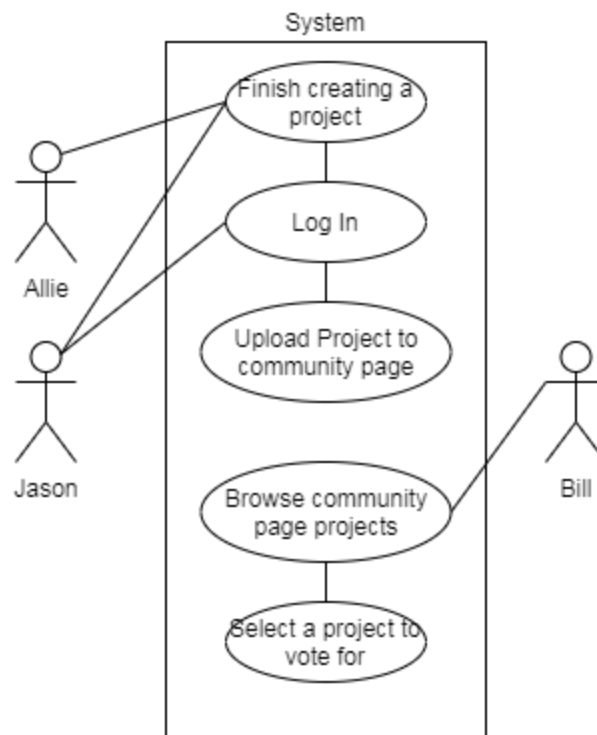| Use Case Title	Reporting a user
Actors	Alex (Registered User) - Alex is a producer and has worked with a few artists before on DoReMeet. He is excited to create more music with other artists. Alan (Registered User) - Alan is a new singer who has only released a couple of songs. Alan has only worked solo so he went on DoReMeet to find a collaborator. John (Admin) - John is a college graduate who has majored in communications. He has just started working at DoReMeet.
Description	Alex and Alan matched through the website and created a song together. However, Alan decided to release the song and did not give any credit to Alex. Alex reports Alan and an email is sent to the admin. John, an admin for the website, investigates Alex's report, and emails Alan giving him a chance to explain his side of the story. Alan responds, but given the lack of a viable justification from him and all the supporting evidence from Alex, John deletes Alan's account. Also, John sends Alan a copy of the website's terms and conditions which he accepted while creating his account, where it clearly states that there can be legal consequences if any party steals/doesn't give credit for any shared collaborations done with connections made on the website.

Use Case Title	Set skill level and Conversation Prompts
Actors	Christen: DoReMeet new registered user who is looking for a specific skill level Tango partner.
Description	Christen is interested in Tango, but she doesn't have any prior dance experience. She uses her account on the website to find a dance partner and sets her skill level as a Tango dancer to a novice. She only wants to meet beginner dancers, who she can learn with. She wants to practice her moves without feeling that she is wasting her partner's time. She filters her search based on people who are within 30 miles of her location and are novice, beginner Tango dancers. She also uses the website's conversation prompts to start a conversation with the dancers she matched with. This makes her feel less anxious and awkward about starting the conversation.

Use Case Title	Submitting a project to the community highlights page
Actors	Jason (Trumpet) Jason is a 34 year old accountant who enjoys playing the trumpet Allie (Clarinet) - Allie is a 27 year old beautician enjoys playing the Clarinet Bill (Violin) - Bill is a 60 year old lawyer who plays the violin and likes orchestral soundtracks
Description	Jason and Allie met each other on the site a few weeks ago.They have formed a duet as they both enjoy classical music and have been working on recording a song together. After finishing their song, Allie and Jason decide to post their work to the community highlights page. They navigate to the community page after one of them logs in their account and they begin the process of uploading their work. They upload the mp3 file of their song along with a description of the work. After they have finalized their details they submit the work and the project is uploaded. Bill is browsing the community highlights page and sees Allie and Jason's project. After listening to the mp3 they uploaded he is very impressed and decides to give their project a vote for the best project of the month.

Use Case Title	Premium features
Actors	Olivia: DoReMeet registered user who decided to pay a premium account. She is looking for a dance partner for a Latin dance competition. Jim: DoReMeet registered user who has a premium account, and is also a seasoned amateur dance competition participant.
Description	Olivia is a passionate amatuer dancer. She loves all types of dances, but she's especially passionate about Latin dances. She wants to participate in a Latin dance competition. She already has a DoreMeet account, and using her regular account, she has been successful in finding suitable dance partners. She was planning to do it this time as well, but she quickly ran through her limited number of free "likes" for the day. She'd have to wait 24 hours to be able to access her next batch of free likes, but she doesn't want to wait that long. So, she decides to subscribe for a premium membership for the month. With the membership, her profile is highlighted to other users and it makes her stand out from other users. She believes that this will increase traction to her profile, and up her chances of getting likes back. Also, with the regular account, she would sometimes get annoyed by advertisements, which are completely removed from her new premium account. As soon as she pays her premium account, DoReMeet also lets her extend her search radius to 150 miles, so now she can use her unlimited likes for a wider range of users. She is happy with her decision to pay for the premium account. Jim is an amateur competitive dancer, and is also a long time DoReMeet premium account user. He's successfully found dance partners in the past, and is looking for someone to participate in a Latin dance competition with. He sees Olivia's profile and passes on her. But after he passed, he thought they'd be a good match, so he rewinds on her profile. Olivia too had liked Jim, and given they both liked each other, they are connected by the platform.

System
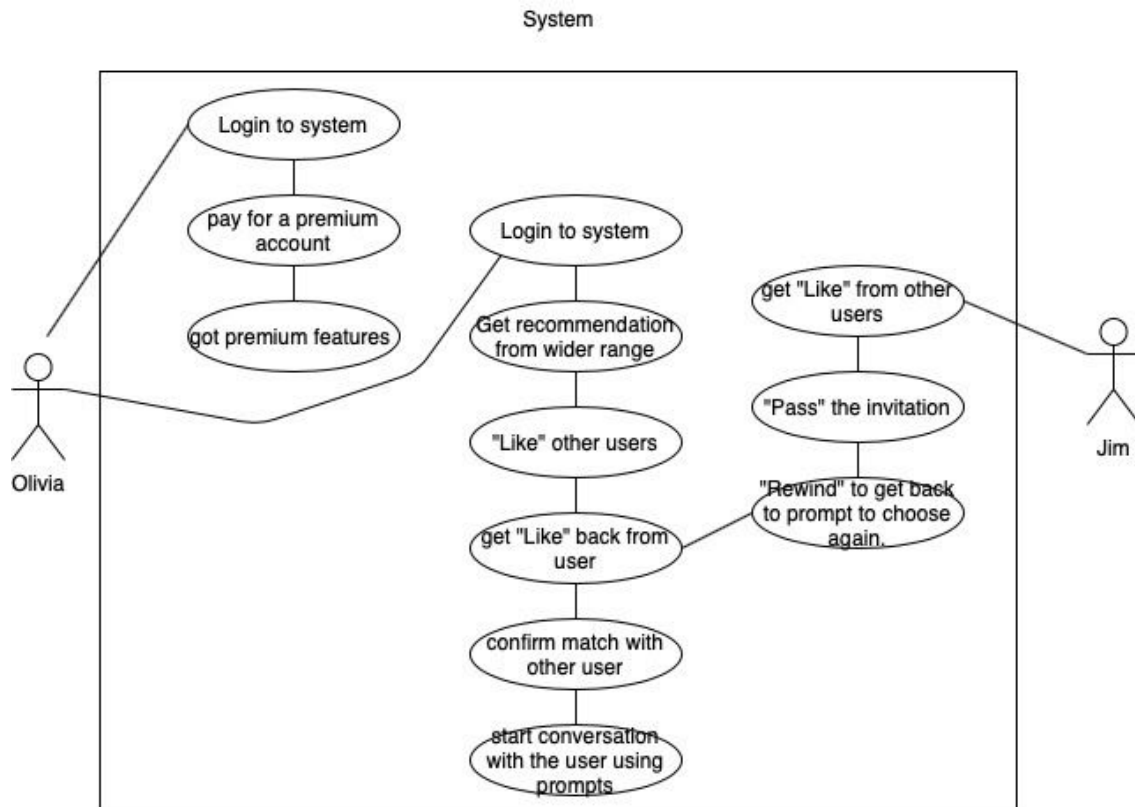
3. Main Data Items and Entities

1. **Registered User/User** - A user is any individual who has created an account on the website using their name, a valid email, date of birth and password.

2. **Unregistered User** - Any individual who has not created an account is an unregistered user.

3. **Landing Page** - The first page any individual, both registered and unregistered, will see when they visit the website. The page shall lead to a sign up or login page.

4. **Account** - An account is an entity associated with a user, and the site sees each user in terms of their valid account.
   a. *Active/Activated account* - An active account is a user account that is in service and the information is stored on our database. An account is active when the user first creates and sets it up. Aslo, the account is activated after the user unpauses their account.
   b. *Paused Account/Inactive Account* - Users have the ability to pause their account or inactivate it without deleting their information. This can be done if the user wants to take a break from using the website, but don't want to leave the platform all together.
   c. *Disabled Account* - Users with an account have the option to delete their account and remove all their information from our database. Such an account is a disabaled account.

5. **Premium Account** - A premium account is a paid account which in addition to all the features a regular account offers, offers additional features.
   a. *Premium Features* - A premium account includes premium features including unlimited number of likes, extended search radius to 150 miles, increased portfolio size (120mb), highlighted user profile, ability to rewind on a passed potential match and no ads while using the website.
   b. *Rewind* - As a part of their premium membership, users can "rewind" on their last potential match. This means that if they passed on a user, but didn't mean to, or they changed their mind, they have the ability to go back and look at the profile again, and like or pass as they wish.

6. **Profile -** A profile is the user's information on the website. They can set it up in any way they like, displaying whatever information they feel is relevant to them. The site provides means for them to curate their profile and optimize it to gather more traction.
   a. *Bio* - A bio is a brief text description that the user can add to their profile to describe what they are looking for, or talk more about their work.
   b. *Photos* - Users have the ability to add pictures of their work or anything relevant that showcases their interest or what they are looking for.
   c. *Videos* - Similar to photos, users can add short videos to their profile showing their work as well. This is especially useful for musicians, dancers and filmmakers, who will get a chance to showcase a snippet of their work.

d. *Links* - Users can add links to their website or our portfolio pages on their bio to endorse their work.
e. *Linked Accounts* - Users have the ability to link other accounts to our website. For instance, they can link their Instagram, Youtube or Spotify account to show more of their portfolio.

7. **Preferences** - Users can customize their profile by adding preferences to it. These preferences will make their account more personalized and will help them get more targeted potential matches. The users can add a variety of preferences from the given choices:
   a. *Art Categories* - The users will be able pick one of the five art categories - *painting, dancing, music, photography, cinema* - and their profile will get hits in that category only, i.e. dancers will see others dancers while singers will be put in a pool of other singers. This will help users get direct access to the community they are seeking to join.
   b. *Work Type* - The site provides a platform for both passion projects and work. Users can filter their potential matches based on their preference and choose to work with others on serious projects or just collaborate on a passion project/hobby.
   c. *Distance* - The users have the option to set distance preferences if they are open to meet other people in person. They can choose any radius between 1 mile to 100 miles (150 miles for premium account users) of their geographical location, and they will see potential matches only in the specified distance. Premium account holders can extend their radius upto 150 miles.
   d. *Meet online only* - Users also have the option to set their profile preference to meet online only - i.e. they can opt to see only users who want to meet online and collaborate virtually. They don't have to share their location in this case, but will still have the option to filter what countries or cities they want to see the artists from.
   e. *Gender* - Users will have the option choose artists based on gender (Mael, Female, Trans)
   f. *Age* - Users can also set an age range as a preference criteria for their potential matches. They can choose any range between 18 and 100 years of age. Users have the ability to set *minimum* and *maximum* age filters for their potential matches.
   g. *Skill* - Users have the ability to set their skill level (novice, competent, experiences, expert) on their profile and can choose to only see potential matches based on their skill level. For instance, they can choose to learn with other novices or work with an expert.

8. **Tags** - Users will be able to add tags to their profile, which highlight key aspects about them, for instance a user is interested in art, portrait painting in particular and wants to meet fellow artists younger than 30 years in 50 miles of his radius. Also this is just a hobby for him, so he can add portraits, hobby, meet in person, as more such things as his tags, which help condense the information on his profile and get it more traction from other users looking for similar things.
   a. *Custom Tags* - Users can create their own custom tags to really highlight what they want. Some instances could be "unpaid", "urgent", "fun", "volunteer partner", "LGBTQ friendly" or anything that they think is relevant to their profile. The custom tags help share more about the user with potential matches and make more fitting connections.

9. **Potential Matches** - Potential Matches are the users that a user sees based on their preferences. The potential matches fit whatever criteria the user has set for art category, distance, age, skill or gender. The user has the option to either pursue these matches or forego them. These are just people who the system thinks would be a good match with the user.
   a. *Waiting State* - Potential Matches that are liked by one user are in a waiting state till the other user either likes or passes on them.
   b. *Filtered Results* - The potential matches can be filtered based on the preferences set by the user. For example, if a user sets distance limitations, all potential matches outside that radius will be filtered out.

10. **Likes** - Likes are the potential matches that the user wants to pursue. If the user does want to work with these potential matches and if they like them back, then the two of them will be connected. Regular account holders can like upto 100 people per day, whereas premium account users will have unlimited number of likes.

11. **Pass** - Passing are the potential matches that the user does not want to pursue, because they don't match their interest or they don't think would be a good match for them. Even if these potential matches, that the user passed, likes them back, they will not be connected, given it is not a mutual interest to work together.

12. **Matches/Matched users** - Matches are the potential matches that the user liked and who liked them back. Given their mutual interest in being connected, the site matched the 2 users and provided them a platform to interact with text messages, share photos/media etc and collaborate on whatever project they were both seeking to pursue.

13. **Community Page -** The community page holds joint projects that users have uploaded. Users who match with others on the site and go on to create something have the option to upload that project here and browse the projects that others have made. Users can vote on which project they think deserves to be the project of the month.

14. **Highlights of the Month -** The highlights of the month will be community voted projects. Each month the projects with the highest number of votes will be showcased as the highlights of the month for all users.

15. **Report** - A user has the ability to report any potential matches or matches if they engage in any illegal, violent or indecent activity. A reported user will be investigated and can have their account suspended if found guilty.

16. **Flag** - A user has the ability to flag any inappropriate content that they see from any potential matches or matches. The content will be reviewed, and if found in violation of the site's policies will be removed from the site. Also the user who posted it, will be notified with a warning regarding the content.

    a. *Inappropriate Content* - Content that violates our websites Community Guidelines, and/or aims to promote violence, hate or bias is considered inappropriate.

17. **Block** - A user has the ability to block any potential matches or matches if they feel don't want to engage with that person. Any blocked user will not be seen by the user and will not be able to connect with or contact the user.

18. **Unmatch** - A user can choose to unmatch with any of their matches, if they realize they don't want to pursue that connection, or don't want to stay connected for any reason. An unmatched user is not blocked, and can still appear in the users potential matches.

19. **Messaging/Chat Window** - When connected with a user (a potential match who the user likes and who liked them back), the user can connect with the match using a messaging or chat window, where they can share information via texts, photos or short videos.

20. **Conversation prompts** - The chat window gives initial conversion prompts when the users are first matched. This is to promote engagements and help users reduce the anxiety of coming up with a conversation starter. These prompts are suggested to promote engaging and productive conversations between the matches.

21. **Password** - The user needs to set a password when they create an account. The user then uses this password to log into the website from any device or browser. The password needs to meet certain security requirements (password length, special characters etc. as per the standard), to ensure that it is a strong password that cannot be easily cracked.
    a. *Forgotten Password* - The user might forget their password, and they have the ability to say they forgot their password, at which point they'll be given a special link to reset their password via email.
    b. *Reset Password* - The user can choose to reset their existing password (even if it is not forgotten) and will have the ability to do so.

22. **Administrator/Admin** - An administrator or admin is someone who has access to the site's backend is able to investigate any flagged or reported activities on the website. An admin has the ability to remove any content/user that is found in violation of the website's policies.

23. **Customer Service** - Customer Service is a support team for the website that can help the users with any technical or logistical difficulties and can help them navigate the website better. Aso the customer service is able to support the user with any settings, password updates etc.

4. Functional Requirements

Registered User (also referred to as user):
1. Users shall be able to sign in to the website.
2. Users shall be able to sign out from the website.
3. Users shall be able to change their existing password.
4. Users shall be able to troubleshoot login problems.
5. Users shall be able to activate 2 factor identification.
6. Users shall be able to deactivate 2 factor identification.
7. Users shall be able to Like other users.
8. Users shall be able to Pass other users.
9. Users shall be able to view potential matches' profiles.
10. Users shall be able to view their matches' profiles.
11. Users shall be able to report other users.
12. Users shall be able to flag inappropriate content.
13. Users shall be able to block other users.
14. Users shall be able to vote on collaborations posted on the community page.

Unregistered User:
15. An unregistered user shall be able to create an account using a valid email.
16. An unregistered user shall be able to only see the landing page of the website.
17. Unregistered users shall have to confirm their account registration via a valid email.
18. An unregistered user shall be required to enter a date of birth upon account creation.

Account:
19. An account shall have one valid email linked to it.
20. An account shall be paused by the user anytime they want.
21. An account shall allow users to login while it is paused.
22. An account shall be disabled by users through the settings page.
23. An account shall be reactivated by the user anytime they want.
24. An account shall be active to allow users to continue matching with others.
25. An account shall allow its user to modify the password.

Premium Account:
26. A premium account users' profile shall be highlighted.
27. A premium account users' shall have access to premium features.
28. A premium account user shall have to pay for premium features.
29. A premium account user shall be able to save their payment information.
30. A premium account user shall be able to update their payment information.
31. A premium account user shall be able to cancel their subscription.

Profile:
32. A profile shall allow users to upload pictures.

33. A profile shall allow users to delete pictures.
34. A profile shall allow users to upload text descriptions as bios.
35. A profile shall allow users to update their bio.
36. A profile shall allow users to delete their bio.
37. A profile shall allow users to upload short videos.
38. A profile shall allow users to link their Youtube account.
39. A profile shall allow users to link their Spotify account.
40. A profile shall allow users to link their Instagram account.
41. A profile shall allow users to link any websites.
42. A profile shall allow users to change what is displayed publicly on their account.

Preferences:
43. Preferences shall allow users to filter potential matches based on art categories.
44. Preferences shall enable users to choose if they want to meet online.
45. Preferences shall enable users to choose if they want to meet in person.
46. Preferences shall enable users to share their location.
47. Preferences shall enable users to change their match preferences to online only.
48. Preferences shall enable users to change their match preferences to local only.
49. Preferences shall let users set a location radius for meeting in person.
50. Preferences shall let users filter by country if they choose to meet online.
51. Preferences shall enable users to filter by city if they choose to meet online.
52. Preferences shall enable users to adjust preference of minimum age for potential matches.
53. Preferences shall enable users to adjust preference of maximum age for potential matches.
54. Preferences shall let users to filter match preferences based on gender.
55. Preferences shall let users to set skill levels.
56. Preferences shall allow users to update their skill levels.
57. Preferences shall let users to filter potential matches based on skill levels.

Community Page:
58. The community page shall contain work that has been created by a collaboration of users.
59. The community page shall contain highlights of the month.

Highlights of the Month:
60. The Highlights of the Month shall contain one work that has the most votes for Uniqueness/Creativity.
61. The Highlights of the Month shall contain one work that has the most votes for Effort.
62. The Highlights of the Month shall contain one work that has the most votes for Quality.

Admin/Administrator:
63. Administrators shall be able to see a flagged user's account.
64. Administrators shall be able to see a reported user's account.
65. Administrators shall be able to delete a user's account.
66. Administrators shall notify a flagged user about any removed content.

Password:
  67. Passwords shall be updatable via email in case the user forgets their password.

Tags and Custom Tags:
  68. Tags shall be added to the users profile to highlight preferences.
  69. Custom Tags shall allow users to list special requirements.

Matches:
  70. Matches' profile shall be accessible to the user.
  71. Matched users shall be able to communicate via text message.
  72. Matches shall be able to share photos via chat.
  73. Matches shall be able to share videos via chat.
  74. Matches shall be able to search within their match list by first name.
  75. Matches shall be able to search within their match list matches by username.
  76. Matches shall be able to use default conversation prompts in chat.
  77. Matches shall be able to unmatch their existing matches.
  78. Matches shall be made when both users like each other.

Potential Matches:
  79. Potential Matches shall be liked by both users to become a match.
  80. Potential Match shall be removed if a user passes on them.
  81. Potential matches shall be matched when both users have liked.

Chat Window:
  82. Chat window shall show a list of all the conversations between matches.
  83. Chat window shall allow users to sort matches by name.
  84. Chat window shall allow users to sort matches chronologically.
  85. Chats with each match shall have the option to interact via audio call.
  86. Chats with each match shall have the option to interact via video call.

Customer Service:
  87. Customer Service shall be able to chat with users.

5. Non-Functional Requirements

Security:
1. Accounts shall optionally have 2 factor identification enabled.
2. User's password shall be encrypted in the database.
3. The site shall verify the users' credentials before successfully logging them in.
4. The website will have a SSL certificate (https://).
5. The website shall have OAuth 2.0 implemented.
6. Accounts shall only have one password. There shall be no master key.
7. The website shall warn users when clicking on links that take them to another website.
8. Premium account users' payment information shall be encrypted in the database.

Storage:
9. Each account shall be able to store up to 80mb of associated content.
10. Each premium account shall be able to store up to 120mb of associated content.
11. A single media shall be less than or equal to 10mb.
12. User's data shall be saved into the MYSQL database.
13. Users data should be removed from the database when the user deletes their account.
14. User accounts that have not been logged in for 1 year shall be disabled.

Availability:
15. The site shall be up and running at all times excluding system failures and scheduled maintenance.
16. The site shall notify of all scheduled maintenance, 1 week in advance.
17. The users shall be notified via email about all scheduled maintenance, 1 week in advance.
18. Any/all scheduled maintenance shall be scheduled past 10pm PST on Mondays.

Functionality:
19. The website shall be hosted and deployed on the AWS server, EC2 instance.
20. Account details on the database shall be modifiable.
21. User details on the database shall only be modified by the user themselves.
22. Only flagged user details, that have been reviewed, shall be modified by the admin.
23. The user shall log in using either email or username.
24. The user shall be required to enter both password and email/username to log in.
25. The user shall need a valid email to create an account.
26. Users should be minimum 18 years of age to create an account.
27. The users' password shall be censored on the sign in page.
28. The users' password shall be censored on the sign up page.
29. The website shall be responsive to user input.
30. A premium account shall accept Visa, MasterCard and American Express.
31. A premium account shall accept GooglePay and ApplePay as a valid payment method.

Fault Tolerance:

32. Upon a system crash a global error page shall be displayed for all users trying to access the site.
33. There shall be a backup for the website before any update is pushed.
34. There shall be a backup for the database every week on Tuesday past 10:00pm PST.
35. Error messages shall be relevant to the user (ex. "Site is down at the moment" or "Your account has been suspended" etc.)

Scalability:

36. The number of accounts that the system shall be able to handle should be scalable based on consumer demand/traffic.

Privacy:

37. Developers and staff shall not have direct access to sensitive user information.
38. Anyone without a registered account shall not be able to view profiles of registered users.
39. The site shall accept cookies/cache only if the user explicitly allows it.
40. Users shall not be able to see other users' password.
41. Users shall not be able to see other users' email.
42. Users shall not be able to see other users' phone number (if provided).
43. Users data shall not be shared with any third-party applications/sites/organizations.
44. Users data shall not be sold to any third-party applications/sites/organizations.
45. The site shall not gather any unnecessary data from users.
46. Users' geolocation shall only be known by the website if they allow it.
47. Premium account users' payment information shall only be visible to that particular user.

Compatibility:

48. The site shall be compatible with Safari (version 10.0 - 14.0), Chrome (version 80 - 85.0) and Mozilla Firefox (version 78 - 81) and Edge (version 85).
49. The site shall be compatible with Mac OS (10.12.6 - 10.15), Windows (7 and 10) and Linux.
50. The site shall be compatible with mobile browsers on both iOS and Android.

Look and Feel:

51. The site shall maintain a core color scheme.
52. The website shall have a functional navigation bar on every page.
53. The website shall have a user settings page.
54. The website's logo shall direct the user to the main home page.
55. The website shall be mobile-friendly.

Ease of Use:

56. The site shall maintain less formal vocabulary and diction.
57. A preview of what the site has to offer will be displayed on the site landing page.
58. Website UI shall be simple and efficient.
59. Website UI shall be easy to use.
60. Website UI shall be intuitive.

61. Users shall be able to find what they need on the website in 5 seconds.

Coding Standard:
62. The whole site shall use the same coding standards related to code indentation.
63. All functions shall be modularized.

Marketing Requirements:
64. The website shall not make any political marketing campaigns.
65. The website shall have a logo on the navigation bar.
66. The website shall have a logo on the "tab" for site identity.

Legal Requirements:
67. The site shall explicitly not endorse any activity that is illegal, according to the U.S law.
68. Access to the website's policies shall be available at the bottom of every webpage.
69. The site shall protect all user data under the privacy laws in the U.S.
70. The site shall be transparent about the use of user data.
71. An unregistered user shall have to agree to the website's terms & conditions to successfully create an account.

Performance:
72. Match results shall be filtered in at least 1 second.
73. The website's response time shall be at most 1 second.
74. 2 factor identification code shall be sent to the user's phone in at most 5 seconds.

Expected load:
75. The system shall be able to handle up to 1000 users at once.

6. Competitive Analysis

Feature / Company	Instagram	Thumbtack	ArtistsNearby	Craigslist	Our Product (DoReMeet)
Main Purpose	Photo and video sharing social networking site	Service that matches customers with local professionals	Service that connects professional and amateur artists to a world-wide community of artists	Classified advertisements website with sections for wanted, services, community service	Platform dedicated for artists to find collaborators, mentors and/or friends.
Major strength	Expansive user base, monetary backing, brand name, easy to use	Expansive database, clean UI, reliable	Global community of artists	First movers advantage, vast user base	Simple model to help artists connect with other artists (without being bogged down by other professions), both for fun and work. Reliable and secure - connecting only those who are mutually interested in collaborating
Weaknesses	Can be generic, web traffic is self-contained	Limiting in terms of sub categories, limited to services for hire	Hard to complete searches, no custom searches/unable to filter results based on preferences	Bad UI, hard to navigate, unreliable and unsecure	Limited options at a time. Can get limiting based on preferences, so user might have to expand their search
Backend/API	Django Python, React Native	PHP with Go and Scala backend services, React	JavaScript/ jQuery,	Perl	JavaScript, React. Location API - locationiq.com
UI	Scroll through photos, videos. Follow other users and view user profiles as a grid or in scroll view	See list of individuals providing services and select based on personal preferences	See list of individuals providing services and select based on personal preferences	See list of goods and services being sold/ rented/ offered	See 1 profile at a time and choose between "liking" or "passing" them to continue. Simplified decision making model

Target Audience	General Public (generally younger people)	People providing and seeking a wide range of services	Artists, art-lovers, people looking to hire artists and art buyers and sellers	General Public (looking to buy and sell services and commodities)	Artists (painters, singers, dancers, photographers, filmmakers/theatre artists)

COMPETITIVE FEATURES TABLE

Feature	Instagram	Thumbtack	ArtistsNearby	Craigslist	Our Product (DoReMeet)
Expand and Shrink Search Radius	-	-	-	-	++
Exclusively targeted towards artists	-	-	-	-	++
Collaboration Highlights	-	-	-	-	+
Community building	+	-	-	-	+
Targeted Matches	-	++	+	-	++
UI	+	+	+	-	++
Ease of Use	+	++	-	-	+

+ feature exists; ++ superior; - does not exist

DoReMeet is a platform where we provide a service for the sole purpose of connecting artists, unlike our competitors which focus on a more general audience. Our platform is unique from our competitors because we offer a simplified, and not overwhelming space for users to pick and choose from artists nearby and around the globe. Unlike our competitors, we don't show users a bulk of fellow artists to pick from; instead we show that one person at a time and they get to directly see that individuals work. Most of DoReMeet's competitors require the user to go to a specific profile to view it, but we make this process simpler by showing the entire profile as a potential match and giving the user the resources needed to make an informed choice, quickly. Also, this limits any negative, unwanted traction to a users' profile, because they only see (and are similarly only shown to) people who match their personal preferences. DoReMeet aims to make targeted connections, based on shared interests, and thus reduces effort on the users' part to find a suitable match.

Additionally, we offer the ability to choose a custom distance to find a potential match i.e. we allow the users to set their search radius anywhere between 1 mile and 100 miles (150 miles for

premium account users), and show them potential matches based on their preference. This ability to expand and shrink their search radius makes the matching process more sustainable and impactful. The closest our competitors come to offer distance based search is based on zip code, which generates rather generic results.

We will be using JavaScript to efficiently handle all web page requests, and this will also permit us to get to client input information (client data) more effectively. Any delicate user data will be encrypted for security and privacy. We will also implement OAuth 2.0 as a security measure to strengthen the integrity of a users' account. To implement custom distance, we will use a reliable Location API - locationiq.com (services upto 5000 requests/day for free) to provide GPS info, and at no point will the user have to manually input their address/location.

The collaboration page will utilize a good UI and UX in order to provide a seamless and streamlined experience for users to browse the work of other creators. Viewing the uploaded work of others, users will be able to vote on the works that they like the best. These votes will be tallied up at the end of the month and the projects with the most votes shall be showcased accordingly. Utilizing React and JavaScript, this aspect of the site shall be easy to interact with and should build a community on the site that other applications/websites fail to do.

DoReMeet, unlike our competitors, offers a no pressure setting to connect and learn with/from people. The users range from experts to novices and users have the opportunity to find these matches based on their choice, for either a fun collaboration or for serious, paid work. We do not limit the user base to any category, and users are free to switch their preferences any time. In addition DoReMeet also offers a Community page to share collaborations, and give a chance to build an art community. Collaborations are rewarded as "Highlight of the Month" based on their popularity in the community.

In conclusion, while there are services where artists can connect with other artists/people seeking their services, there are no products like DoReMeet which offer quick, reliable and personalized service, specifically for artists.
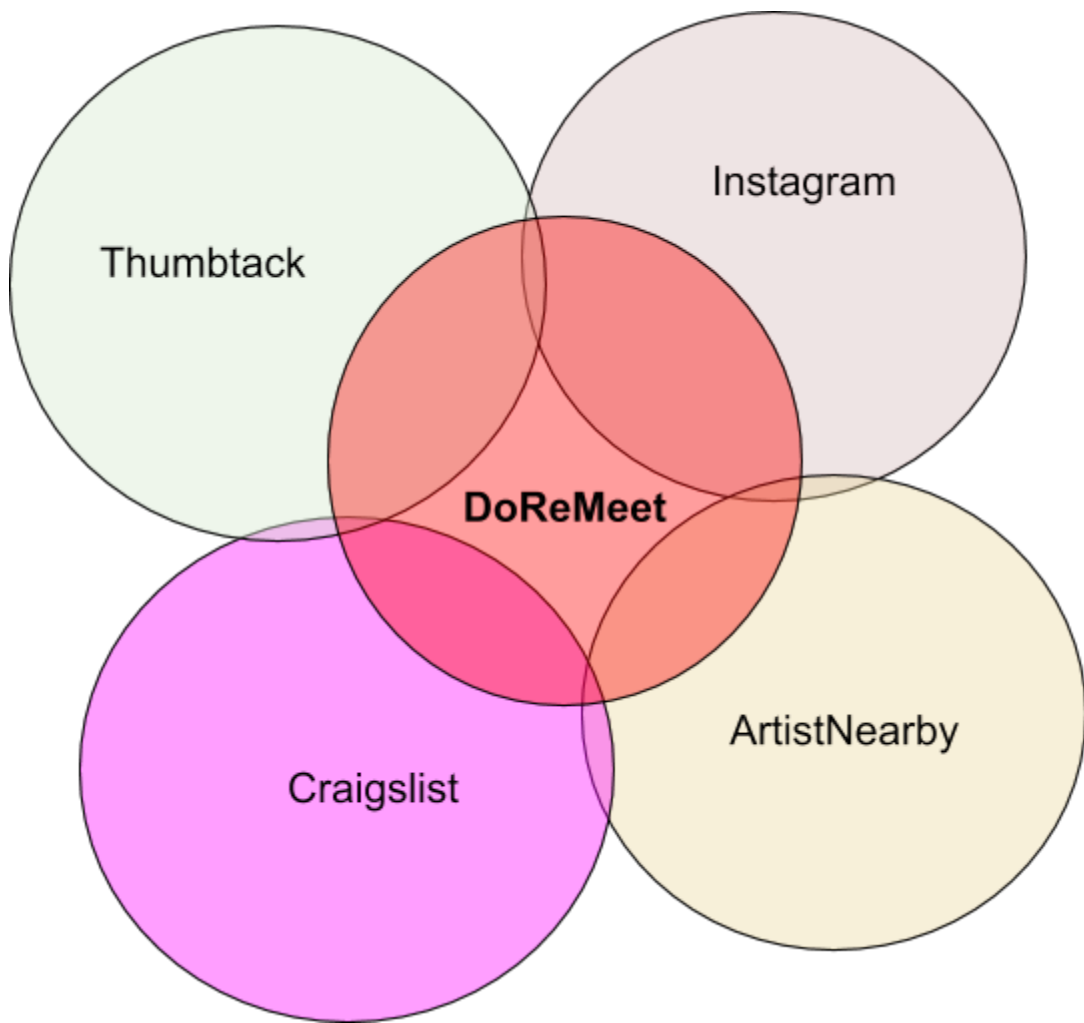
7. High-level System Architecture and Technologies

- **Server Host**: Amazon Web Services (AWS Free Tier EC2 instance)
- **Operating System**: Linux: Ubuntu 18.04 Server
- **Database**: MySQL 8.0
- **Web Server**: Apache HTTP 2.4.46
- **Server-Side Language**: JavaScript
- **Additional Technologies**:
    - Web Framework: React.js, Angular.js, Node.js
    - Other frontend languages: HTML, CSS
- **SSH**: bash
- **SSL Cert**: Let's Encrypt
- **Web Analytics**: Google Analytics
- **IDE**: IntelliJ IDEA
- **Version Control & Collaboration Tool**: Github
- **Documentation**: Google Drive / Google Docs
- **Project Management Tool**: JIRA (Scrum Board)

8. Team Contributions

Member	Role	Contributions
Nimiksha	Team Lead and Documentation Lead	Discuss product idea and features, and wrote the executive summary Wrote 2 use cases along with their diagrams Identified and defined the main data items and entities list Contributed to functional and nonfunctional requirements Sort and refine functional and nonfunctional requirements Identify competitors and features; wrote the competitive analysis Added System architecture details *Post Feedback*: Updated Executive Summary, Use Cases, Data Entities, Functional Requirements and Competitive Analysis
Meet	Backend and Database Lead	Discuss product idea and feature to create executive summary Wrote 2 use cases along with the diagrams, however they were merged with others Helped identify main data items and entities Contributed to functional and nonfunctional requirements Sort and refine functional and nonfunctional requirements Identify unique features and do competitive analysis *Post Feedback*: Updated Functional Requirements, Non-Functional Requirements and Competitive Analysis
Luke	Frontend Lead	Discuss product idea and feature to create executive summary Wrote 3 use cases along with their diagrams Helped identify and define main data items and entities Contributed to functional and nonfunctional requirements Sort and refine functional and nonfunctional requirements Identify unique features and do competitive analysis *Post Feedback*: Updated Functional Requirements, Non-Functional Requirements, Use Cases and Competitive Analysis
Mike	GitHub Master and Backend Engineer	Discuss product idea and feature to create executive summary Wrote 2 use cases along with their diagrams Helped identify and define main data items and entities Contributed to functional and nonfunctional requirements Sort and refine functional and nonfunctional requirementsIdentify unique features and do competitive analysis *Post Feedback*: Updated Use Cases, Functional Requirements and Non-Functional Requirements
Jungsun	Database and Backend Engineer	Discuss product idea and feature to create executive summary Wrote 1 use cases along with its diagrams Contributed to functional and nonfunctional requirements Sort and refine functional and nonfunctional requirements Identify competitors, unique features for our product and do competitive analysis *Post Feedback*: Updated Functional Requirements, Non-Functional Requirements, Use Cases (added new use case) and Competitive Analysis

Vincent	Server Admin and Frontend Engineer	Discuss product idea and feature to create executive summary Wrote 1 use cases along with its diagrams Helped identify and define main data items and entities Contributed to functional and nonfunctional requirements Sort and refine functional and nonfunctional requirements Identify unique features and do competitive analysis *Post Feedback*: Updated Functional Requirements, Non-Functional Requirements and Use Cases

The team worked on all sections of Milestone 1 together during Zoom meetings, and collaboratively created this report.

Post Feedback: Similar to Version 1, all work was done collaboratively on Zoom meetings via a shared Google Document.

9. Checklist

TASK	STATUS
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	ON TRACK
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