SW Engineering CSC648/848 FALL 2020

DoReMeet

Team 02

Milestone 3

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Jungsun Eoh (<u>jeoh@mail.sfsu.edu</u>) - Database & Backend Engineer Vincent Tse (<u>vtse3@mail.sfsu.edu</u>) - Server Admin & Frontend Engineer

History Table

Version	Date	Comments
M3V1	11/19/2020	Initial Submission
M2V1	11/01/2020	Initial Submission
M1V2	10/11/2020	Submission updated with Feedback
M1V1	09/30/2020	Initial Submission

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1. Data Definitions V3

- 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. While registering their account, the user is also required to specify their Art preferences, theur skill level in that category and their phone number (used for 2 factor authentication).
- 2. Unregistered User Any individual who has not created an account is an unregistered user. An unregistered user is eligible to create a free or premium account. An unregistered user can also navigate to the Community page from the Landing page and browse through the recent posts and Highlights of the month. However, an unregistered user cannot make any posts to the community page.
- 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. Also the page will have information about the website, the product along with a link to the Community page, accessible to both registered and unregistered users.
- 4. **Account** An account is an entity associated with a registered 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. Also, 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. Account Type** Every registered user can have a free account or a premium account. A free account is created by default, but the user has the option to opt for a premium account at a small fee, and access the premium features of our website. A user has the ability to switch between a free account and premium account, and vice versa.
- **6. Free Account** A free account is a regular account that every registered user gets by default. Unlike the premium account, the free account does not have paid features. The user is capable of switching from a free account to a premium account and vice versa, as per their leisure.
- 7. **Premium Account** A premium account is a paid account which in addition to all the features a regular account offers, offers additional features. The pricing model for the Premium account is set on 3 levels monthly subscription, 6 months subscription or annual subscription. Premium account gives users a more customized experience and highlights their profile to gain more traction than a free account.

- a. *Premium Features* A premium account includes premium features including unlimited number of likes, extended search radius to 150 miles, increased portfolio size (from 80mb in free account to 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.
- **8. 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. The user has the ability to update their bio from their Profile page anytime.
 - 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. Users can add or delete photos anytime from their profile page.
 - 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.
 - f. *Tags* The tags a user chooses for their account, are also visible on the users profile page. These tags, like the other information, are editable. Tags represent keywords that show what the user is interested in/offering.
- 9. **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 (beginner, intermediate, 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 beginners or work with an expert.
- 10. 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. Tags will help filter a users' profile and help us share more customized potential matches.
 - 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.
- 11. **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. Potential Matches are visible on the match page and a user can choose to either "Connect" with them or "Pass" which would indicate the users' interest or lack thereof in that particular potential match.
 - 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.
- 12. **Likes** Likes are the potential matches that the user wants to "Connect" with. Pressing the green connect button, means a user liked the potential match. 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.

- 13. **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. Pressing the red pass button, means a user liked the potential match. 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. Once a user passes on a potential match, they will not see that profile for 4 week so that they get a more concise experience, but might see the same profile after, giving them the opportunity to pursue the missed match later.
- 14. **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. Matches can be seen under the Chat page, where the user is able to communicate with their match. A user can choose to "unmatch" with any match whenever they like. Also, matches are not lost if a user pauses their account, but will be lost if they delete their account.
- 15. 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. The community page can be accessed from the Home page too, but a user has to be logged in, in order to make any posts. They can however view the recent posts and the highlighted posts even when they are not logged in. The community page shows the top 5 recent posts (based on chronology), though the user can see more if they keep scrolling, and the top 3 highlighted posts (based on number of user votes). Also, a user has the ability to search within the Community page for any particular posts from a genre.
- 16. **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. Only registered users have the ability to vote on the posts shared on the Community page, and the highlighted posts are picked.
- 17. **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. The reports are handled by the admin and are investigated in compliance with the websites Terms and Conditions and Privacy Policy.
- 18. **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.

- 19. **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. A blocked account will not appear on the users' potential match list, ever.
- 20. **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.
- 21. **Message List** The message list page shows a list of all the chat messages of a user with all their matches. The list has a little preview showing the users match's name and their text exchanges. When clicked, the Chat page will show the entire message history between the two users.
- 22. **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.
- 23. **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.
- 24. **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.
- 25. **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.
- 26. **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.

- 27. **FAQs** Available on the footer, FAQs are the most frequently asked questions about the product and the website. The purpose of this section is to help the user navigate the website, without constantly having to contact the admins for small questions. It is a one stop place for most of the users' questions. If there are still questions, they can't find the answer to, they have the ability to go to the Contact page and send a message to the site admins.
- 28. **Privacy Policy** Privacy policy, also available on the Footer on every page of the website, details how we collect and/or use the users' data. The purpose of this is to maintain transparency, and make users aware of how we are using/showing their data. Every user that creates an account, marks that they are agreeing to these privacy policies and will act in accordance with them. Anyone violating these policies can have their account temporarily suspended or even permanently deleted by the admins.
- 29. **Guidelines** Guidelines are also available on the Footer section and share how users can make the best of the product without engaging in any unlawful, violent or hurtful manner. These guidelines are to help the user have a safe and enjoyable experience on DoReMeet. Failure to adhere to these guidelines may result in losing access to our platform.
- 30. Terms and Conditions Terms are Conditions, also available in the footer area, is a contract between the company and the registered users, and aims to educate the users of both their rights and DoReMeet's rights in case of any potential future conflicts. Every user registering an account agrees to these Terms and Conditions, and if they don't, they will not be able to create an account on our platform. Additionally, non conformity to the terms and conditions can lead to the user losing access to our platform.
- 31. **Contact Us** The Contact Us page allows users to communicate with the DoReMeet team to share any questions/concerns/suggestions they might have about the website. The aim of this page is also to get feedback from the user to improve our product to cater more to their needs. The user needs to provide their name and email, along with the message to contact the DoReMeet team, and that email will only be used to correspond with them. It will not be shared with any other users or third party apps.

2. Functional Requirements V3

Priority 1

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.
- 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.
- 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.
- 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.
- 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.

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.
- 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.

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.

Matches:

- 70. Matches' profile shall be accessible to the user.
- 71. Matched users shall be able to communicate via text message.
- 77. Matches shall be able to unmatch their existing matches.
- 78. Matches shall be made when both users like each other.
- 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.

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. Message List shall show a list of all the conversations between matches.

Priority 2

Registered User (also referred to as user):

- 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.

Account:

- 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.

Premium Account:

- 26. A premium account users' profile shall be highlighted.
- 27. A premium account users' shall have access to premium features.

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.

Tags and Custom Tags:

69. Custom Tags shall allow users to list special requirements.

Matches:

- 72. Matches shall be able to share photos via chat.
- 73. Matches shall be able to share videos via chat.

Chat Window:

- 83. Chat window shall allow users to sort matches by name.
- 84. Chat windows shall allow users to sort matches chronologically.

Priority 3

Registered User (also referred to as user):

- 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.

Unregistered User:

17. Unregistered users shall have to confirm their account registration via a valid email.

Premium Account:

- 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.

Preferences:

- 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.

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.

Matches:

76. Matches shall be able to use default conversation prompts in chat.

Chat Window:

- 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.

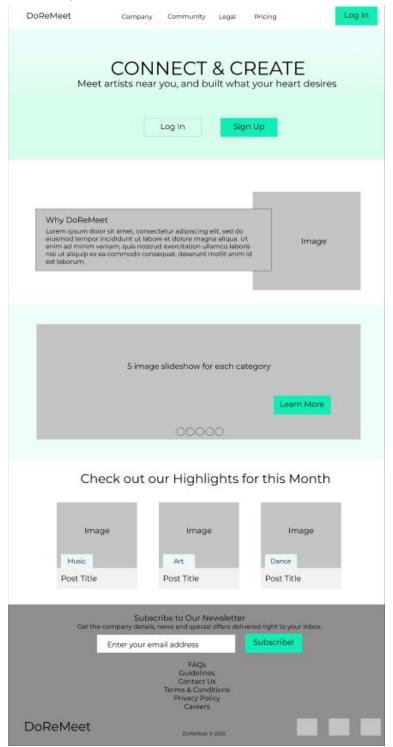
Customer Service:

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

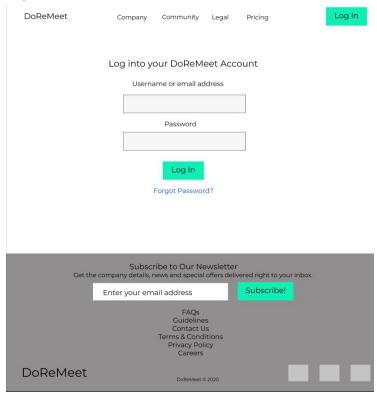
3. Wireframes based on Mockups/Storyboards V2 (detailed)

Pages:

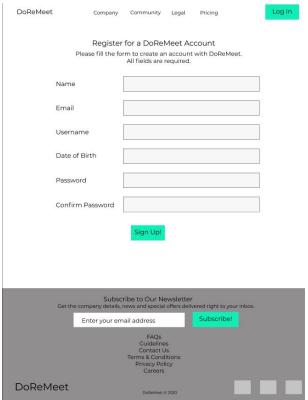
Home Page:



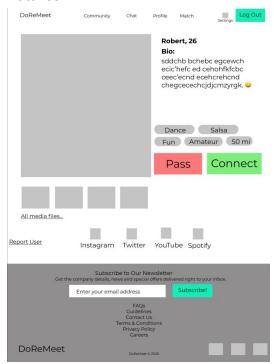
Log in:



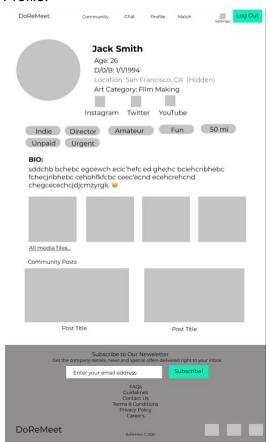
Sign Up:



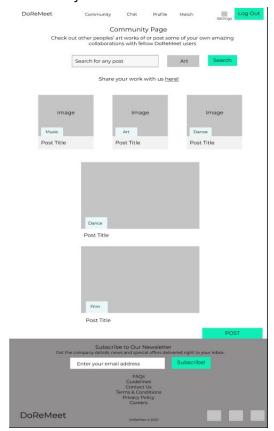
Matches:



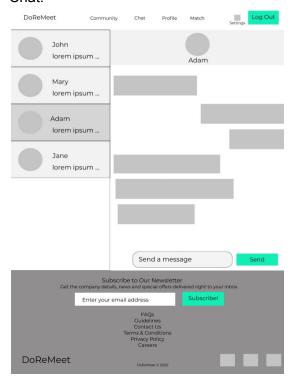
Profile:



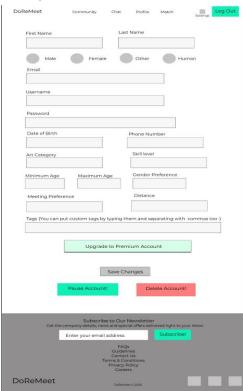
Community:



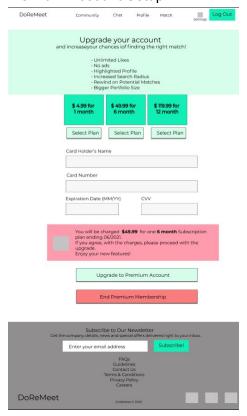
Chat:



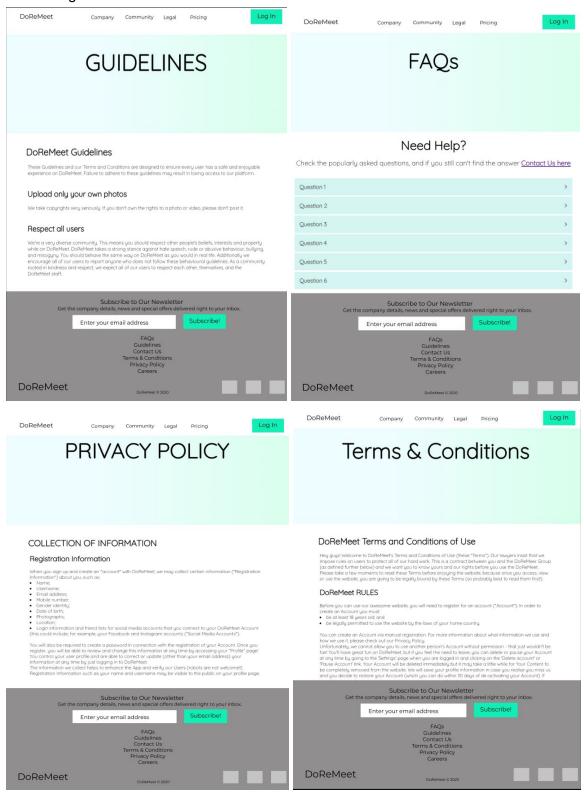
Settings:



Premium Account Setup:

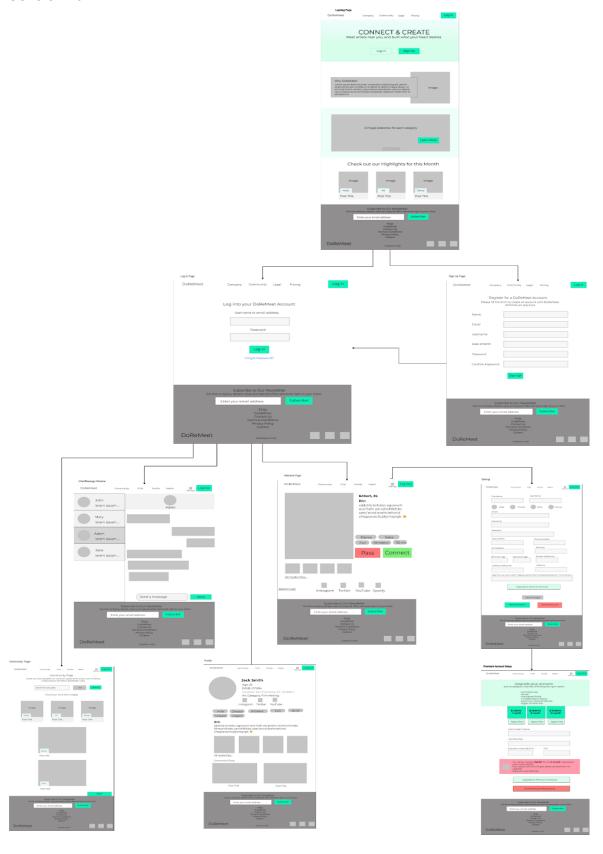


Footer Pages:

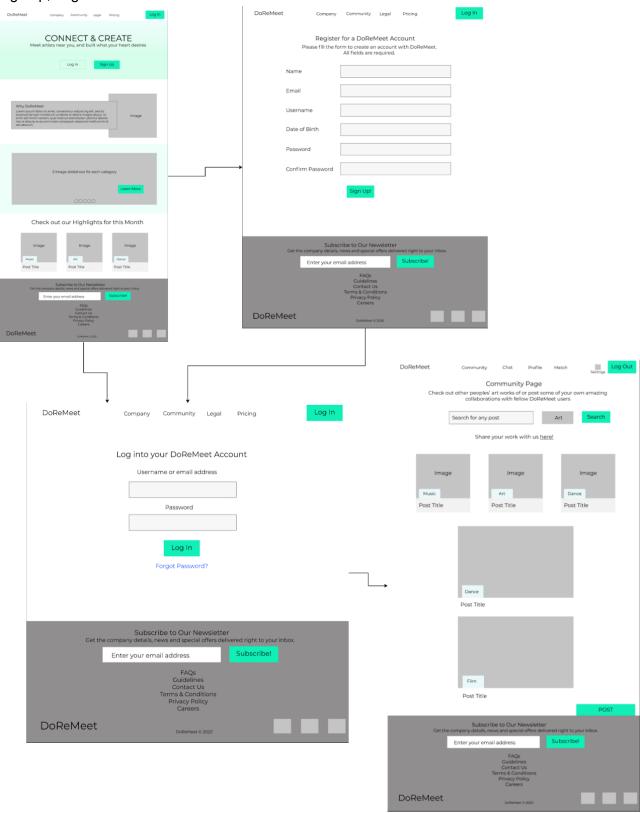


DoReMeet	Company	Community Legal	Pricing	Log In
	CON	TACT	US	
Please fill out the form viscon as possible. Thank you for being a viscon as possible.		ncerns/suggestions you	have, and we will get back t	o you as
Name				
Enter Name				
Email				
Enter Email				
Message/Question?				
Share your Questions	/Concerns/Suggestions	13		
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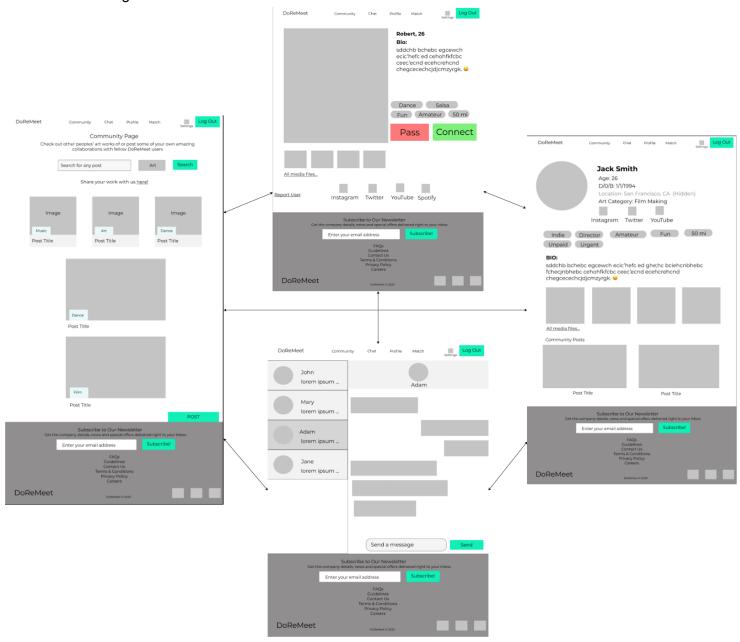
General Flow:



Sign up, Log In:



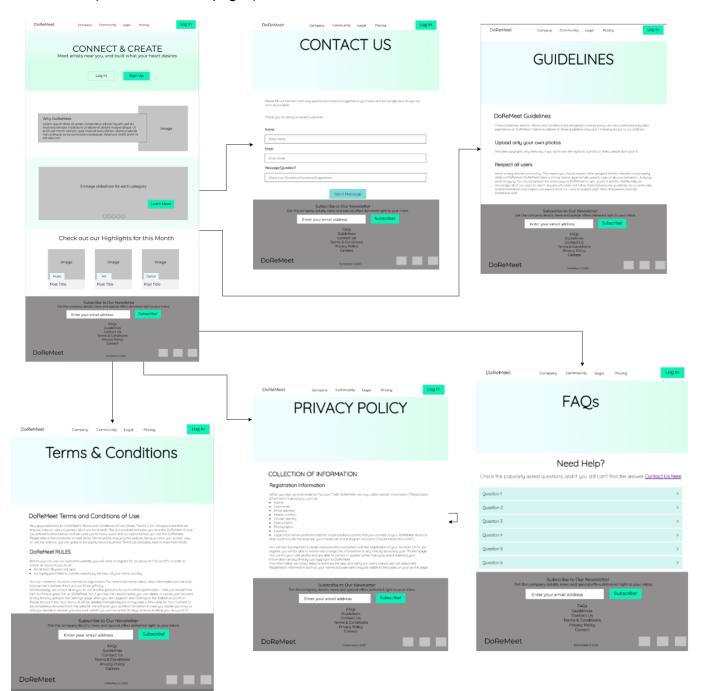
User Pages:



Settings:

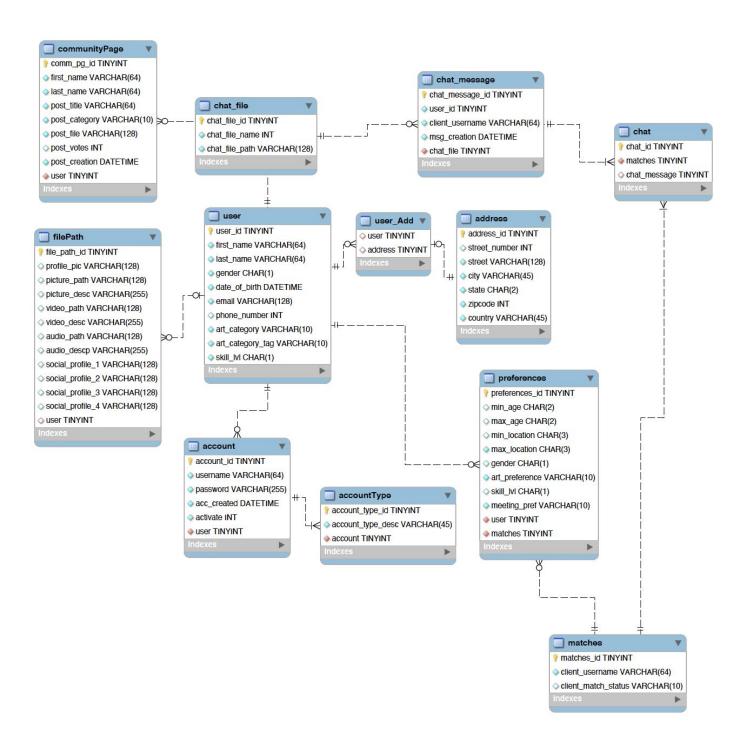


Footer Links (available from all pages):

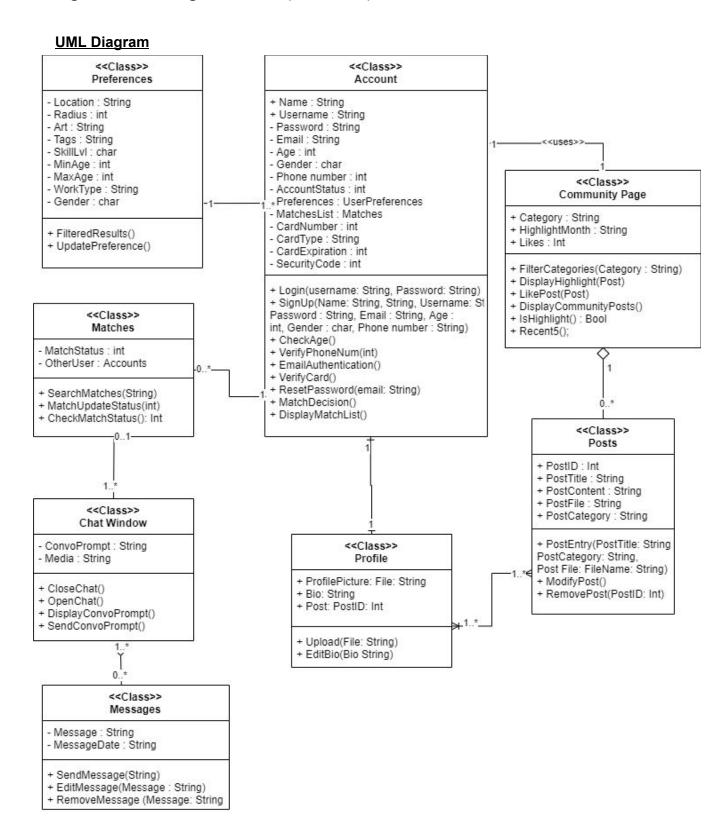


4. High level database architecture and organization V2 (detailed)

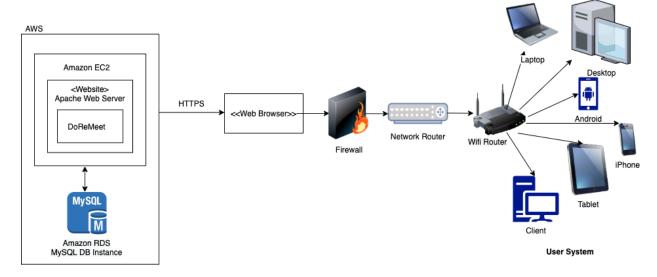
EER Diagram (made using MySQL Workbench)



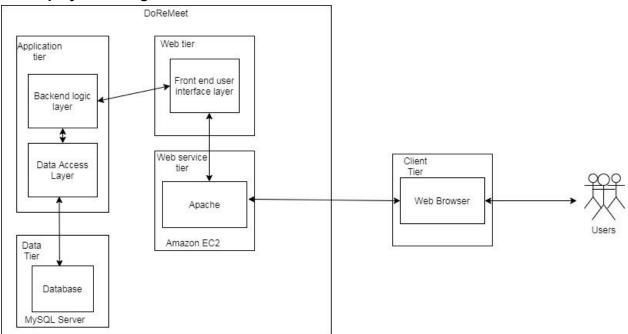
5. High Level Diagrams V2 (detailed)



Network Diagram



Deployment Diagram



6. List of Contributions

Member	Role	Contributions
Nimiksha	Team Lead & Documentation Lead	Documentation: Data Definitions Functional Requirements Wireframes Network Diagram Horizontal Prototype: Frontend for Landing Page, Footer Pages, Log In/Sign Up page Reusable site components - Card Elements, Footer, NavBar, Banner, Buttons Website responsiveness HT access configuration for the website on Apache Server Code Review and cleanup
Meet	Backend and Database Lead	Documentation: Data Definitions Functional Requirements EER Diagram Horizontal Prototype: Set up MySQL Database and connect it to backend Set up AWS RDS Database Connect RDS to local database SQL query planning and optimization Location API setup (to be completed in next milestone) Backend Configurations, Implement Router for Backend Sign Up Page configurations
Luke	Frontend Lead	Documentation: Data Definitions Functional Requirements Network and Deployment Diagram Horizontal Prototype: Frontend for Community Page, Profile Page, Setting Page, Premium Account Setup Connecting frontend to backend Host website on EC2 instance HT access configuration for the website on Apache Server Code cleanup and organization Documentation
Mike	GitHub Master & Backend Engineer	Documentation: Data Definitions Functional Requirements UML Diagram Horizontal Prototype: Connection between frontend, backend and database (sending and receiving queries/requests from the frontend, getting data from the database, sending

		results back to frontend) Host website on EC2 instance HTaccess configuration for the website on Apache Server Login, Logout and Sign Up backend configurations Setting page configuration with backend and database. Get 5 most recent posts for Community page Post and Receive images from database Github management and cleanup
Jungsun	Database & Backend Engineer	Documentation: Data Definitions Functional Requirements Documentation Review Horizontal Prototype: Log in and Sign up backend configuration Location API setup (to be completed in next milestone) Connect RDS to local database
Vincent	Server Admin & Frontend Engineer	Documentation: Data Definitions Functional Requirements Horizontal Prototype: Frontend for Match Page, Chat Page, Community Page Recent post timeline setup on Community page Post and Receive images to and from database Frontend to backend connection EC2 instance maintenance Site responsiveness and cleanup

The team worked on all sections of Milestone 3 together during Zoom meetings, and collaboratively created this report.