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| Category | Sub Features | Details |
| UI | Website | BEAT will be hosted on a website platform catering to users that prefer to use our service through their Internet browsers. |
| Mobile App | BEAT is also available as a mobile app, built on Kotlin and Swift to support IOS and Android compatibility. |
| Graphics | Thanks to the graphics, users are kept engaged on the site [1]. The quantity will be restricted to guarantee that the website loads swiftly and effectively. |
| Hyperlinks | You can discover what is available on our other web pages by clicking on the hyperlinks in the menu pane. |
| Web Responsive Elements | The responsive web is designed for users of varying screen-size devices, flexible grids, breakpoints, and media queries with the aid of various frameworks, JavaScript, and CSS. |
| Main UI | The UI consists of users’ profile pictures, relevant information about the user, their biography, the matching score they received, and an Accept and Reject button. |
| Like & Dislike | Utilizing the Like and Dislike buttons to proceed to the next candidate or confirm the match is the primary method by which users communicate with the platform. |
| Profile system | Account Creation | Users will enter some account information, including a username, a profile picture, some relevant information on themselves, and a personal biography. |
| Social integration | SDKs from Facebook, Twitter, and Google will be used to provide quick account creation by logging in through pre-existing social media accounts. |
| Preferences | Users will be asked a series of yes-or-no questions following the setup so that the matching algorithm can assess their responses. |
| Profile management | By selecting profiles from the menu, users may modify their personal details at any time they desire. Users may view account statistics, including matching rates, history, etc. |
| Navigation  system | Menu system | The menu, which includes links to the home page, their profile, matches, chat rooms, and other pages, may be accessed by clicking on the hamburger icon in the top-right corner of the website/app.  Users can locate menu items they cannot see by using the Search box at the top of the menu. |
| Discover Page | After pressing discover on the menu bar, users will be taken to a discover page, showcasing categories that can narrow down our recommendations. |
| Messaging system | Directory | Create a directory and establish the requisite dependencies, such as APIs and SDKs for Firebase, Websockets, and Socket.io [2].  The chat server and client will reside in this environment. |
| Receiving & Sending | A chat server will manage other back-end tasks that won't be kept locally on the user's device, such as sending and receiving messages, listening for incoming message events, rendering existing messages, and broadcasting new messages to users [2]. |
| Conversation window | The discussion pane allows users to scroll up and down to read earlier messages easily. |
| Contact list | When you click or tap on each contact's profile photo or name, a conversation window will appear for users' access. |
|  | Voice Call/ Video chat | Users can call and talk to each other through our UI, and if users prefer the call to be more intimate, they can speak face to face through the Internet using their devices’ cameras. |
| Matching Algorithm | 20 Questions | Based on the 20 questions game, the algorithm will assign each user a value and pair them with other users who received a roughly comparable value. The list of questions will be cycled and updated constantly to maintain relevance. |
| Scoring system | The algorithm will produce a value according to how similar the two users' are and display it to the users. |
| Machine Learning Utilization | With the use of supervised and unsupervised machine learning, the machine will be given user data to improve user-matching accuracy. |
| Gale-Shapley algorithm | The Gale-Shapley Algorithm will be used to establish stable and ideal matches, ensuring that no participant will end up with an undesirable match. [3]. |
| Geo-matching | Using users’ locations and addresses, the algorithm can match users who live in close proximity to each other. |
| Machine Learning | NLP | We will collect and analyze user texts such as biographies and messages through Natural Language Processing to train our A.I. |
| Icebreakers | Our A.I will generate phrases and sentences to help ease the conversation, such as providing opening lines to users or recommending icebreakers to break a silent conversation. |
| Virtual Assistant | There will be an A.I assistant that can answer users’ queries about how to use BEAT, how to successfully find a match, etc. |
| Notification  system | Notification  page | Notifications provide links to the related pages. The user will be sent to that page by tapping the icons on the menu. |
| Push Notification | Users will receive push notifications on their mobile devices and emails informing them of matched results, messages, calls, and BEAT’s updates and changes. |
| Database  system | Profile information database | All of the user data and profiles will be saved in a MySQL and MongoDB-based database system, where they will be exported into our algorithms for analysis. [4] |
| Datastore | A data store will be created to track user data and messages and aid in the recovery of the messaging engines in the event of errors. |
| Cloud Storage | Our database will be additionally uploaded to a separate cloud service to maintain backups and support remote cooperation and database scaling. |
| Geo sharding | By scattering our database into multiple machines, we can allow the processing of smaller datasets in parallel across shards, reducing latency and workloads[aws]. |
| Security | PGP encryption | To preserve the privacy of our users, we employ PGP encryption to secure and encrypt communications transferred between users as well as information and files saved in the database. [4][6]. |
| TLS protocol | Used in conjunction with the Transport Layer Security (TLS) protocol to verify security certificates and safeguard server communication [4]. |
| Blockchain | Blockchain will be used to reduce fraud and unlawful behavior by generating a record that cannot be altered and encrypted end-to-end [ibm]. |
| Monetary system | Google Adsense | Taking advantage of Google Adsense, by pasting the code provided by Google onto our website and choosing the location for them to appear, white space on the interface can be used for advertisements. |
| Subscription Service | We will provide an optional subscription service that users pay annually to remove advertisements from our BEAT and support our service. |
| Misc | Account Recovery | Users could recover their accounts if they forgot their login information. This will be through a link sent to the email users signed up with; if the link is pressed, we will send them an email containing the password. |
| Report System | If users find a profile with misleading, vulgar, or illegal content, they can flag it down, so our systems will recommend that profile less to other users. |
| Geo-location | Using Google Maps and Google Location Services, BEAT will provide users with accurate location data and support our geo-match feature. |
| Reviews | Users can leave reviews of our service on the review page accessible through the menu. Our team will manually read the reviews to assess our users’ opinions. |

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| Feature | Details |
| Forums | A discussion page for users to post questions, news, or anything on their minds for others to comment on and discuss with each other. |
| Quizzes | Pop-up notifications that display fun questions about love and relationship that users can answer to gain access to our premium subscription for free temporarily. |
| Matching more than two people | A feature for matching multiple people to each other at the same time to cater to people who are interested in polyamorous relationships. |
| Group chat | Chatting feature for users to create a group chat where multiple users can exchange text messages, make voice calls, and stream videos to each other |
| Relationship Advice | Pieces of Advice made by our virtual assistant on maintaining a work-life balance, maintaining a healthy relationship, and avoiding conflicts. |
| Date spot recommendation | Recommendations made by our A.I that provide fun and romantic locations around the users’ area so they can make plans to meet their match. |