

Proposal: Heartcoded

- Do you want to avoid the same old dating platforms that leave you struggling to break the ice with your matches? Heartcoded aims to streamline the dating experience for users by providing far more customization in the matching process and a tailored experience to break the ice.
 - **More intelligent matching:** Utilizing vast user data to create more accurate and compatible matches based on an intake survey, along with continued questions throughout the longevity use of the application
 - **Seamless conversations:** We'll prevent awkward silences by using user data to suggest icebreakers, from hobbies to common interests, or even sharing fun facts.
 - **Wingman:** Our stretch scope incorporates a Hugging Face model to serve as the application's "Wingman." It will utilize user attributes to streamline connections, streamline matching, keep conversations engaging, and encourage real-life meetings.
- Heartcoded is meaningful because it **provides a platform** for users to find a match and engage in **immersive, responsive, and seamless conversations**. Our app prioritizes shared interests over appearances, using a customized questionnaire for matching.
 - When a new user joins, we'll record their account data (username, password, profile picture, user description). Our app will allow users to update or delete their info; their intake questionnaire answers are stored to match them. We will update data upon match formation, along with user feedback, to refine future matches.
 - In addition to managing data to find the initial match, we offer ice-breaking questions based on the personal preferences data stored in the personal profile to maintain exciting and continuous conversations between the matching users.
 -
- We'll dockerize our app for consistent cross-environment operation. We'll use React.js for our Frontend due to its familiarity and support for clean UIs. We're deciding between Ruby on Rails with PostgreSQL or MERN for our backend and database. We'll include six critical features in our initial system architecture.
 - For user authentication and creation, we will store user data in a password-encrypted database. Using backend routes and controllers, we'll manage CRUD operations for user data like profile pictures, descriptions, interests, and passwords.
 - Considering stored user data, we'll implement search and filtering for user profiles using various queries and the matching algorithm in the backend.

- A table storing user location data will also help us give location-based recommendations to users.
 - We'll have a separate questions table for user answers, generating new questions from their responses. After the questionnaire, we'll maintain a matches table to prevent duplicate matches, along with user-initiated unmatching and blocking.
 - We'll have real-time chat with browser notifications, emojis, and media sharing. Chat history will be securely stored in a separate table. User feedback, such as match ratings, will refine our algorithm and provide insights.
- Platforms like Match.com and eHarmony use simple questionnaires to understand user preferences, applying algorithms to match users based on commonalities, but these algorithms need more adaptability to user feedback, prioritizing static data rather than dynamic interaction.
 - Tinder revolutionized dating with the 'swipe' method, emphasizing physical appearance over compatibility. Tinder offers little aid for genuine conversation. Apps like Hinge also implemented features like the 'swipe,' applying algorithms that promote or demote specific profiles due to their perceived desirability.
 - Bumble lets women initiate the conversation, and Coffee Meets Bagel offers curated daily matches, but they aim to solve specific dating challenges through niche features. They may only cater to some audiences and can limit user options.
 - Platforms like OkCupid have used ML/AI to improve matches through weighted questions, user interactions, and preferences to fine-tune their matching algorithms. We will research OKCupid's progress to understand how we can build on and improve their current matching process for a younger demographic.
 -