project Name: Shallow forest

An anonymous user-based recommendation platform of stress management

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# Overview

## Shallow Forest project is inspired by the Lady Gaga and Bradley Cooper’s academy award winning film “A Star is Born”, in which the protagonist plunged himself into depression and alcoholism due to the lack of stress relief guidance. People under huge stress needs help, but sometimes they don’t want to reveal their identity while seeking it. “Shallow Forest” is going to tackle this dilemma by introducing a novel anonymous user-based stress management application that is based on commercial recommendation API (Recombee).

## Sketch of Design

1. Key data structure (Shallow): A “shallow” is a data structure containing the user’s recommendation of stress relieve. It has two parts: i) User’s stress level when creating this shallow 2) User’s option of stress relieve. The option can be but not limited to a funny gif, a few words, a clip of music, or a coordinate for hanging out
2. User Model: The authenticated user, once logged on to the web app, can either “create” a shallow, or “dive” into a shallow. Created shallow will be sent to the recommendation system via API provided by Recombee.com. For the users wanting to “dive” into a shallow, the web app use Recombee API to return a shallow for the user. The user who receiver the “shallow” will not know the original creator of this shallow, and the creator of the shallow will not know who dives into it, hence the anonymity.
3. Web page layout: The main part of the webpage shall be the “shallow” that user create or dive in. (TODO: Need team member’s input on the webpage layout design. The layout can be attached to the proposal as an appendix).

## API to be used

* Firebase: For user authentication and user data storage
* Recombee: The recommendation database and service provider
* Giphy: Gif recommendation service provider

## Task Breakdown

* Index layout design (Background, main menu, and “Shallow” layout design) (html, css)
* Data structure design for “shallow” in json format (e.g. {music: music\_link, gif: gif\_link, words: words\_string})
* Javascript development for user interaction (javascript)
* Initial database buildup on Recombee and Firebase
* Internal beta testing for the recommendation system
* Documentation and presentation preparation

## Reference

* <https://docs.recombee.com/>
* <https://firebase.google.com/docs/reference/js/firebase.database.Database.html>
* <https://developers.giphy.com/branch/master/docs/sdk/>