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Product Backlog

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Problem Statement

With the digitization of our everyday interactions, there is a significant need for surveys to be made available online to simplify the process of taking surveys. The problem with current solutions is that survey templates do not fulfill the needs of every individual. Our product intends to satisfy this need by allowing individuals to configure their own survey templates. Furthermore, our product will offer the ability to provide formatted data to the survey creators, with graphs to suitably represent said data.

Background Information

Audience

Modern surveying experience no longer comprises solely of face to face interactions. Survey creators now interact with participants via online platforms to anonymously and effectively receive accurate responses. Surveys as a subject have a variety of audiences ranging from ones that limit to a specific age group to others that cover entire populations. It's surprising that despite the wide-range use of surveys, existing options are poorly designed and hardly customizable in terms of features and the intuitiveness of the survey itself.

Similar Platforms

The major, already existing platforms that focus on survey creation and deployment are SurveyMonkey, Typeform, Client Heartbeart, and Google Forms. The first three platforms have most of their features trapped behind a paywall and Google Forms, which is free, doesn't match the others in terms of features such as analytics. We are looking at making a completely free platform that allows users to customize their surveys using beautiful templates that are easy to send. We are also offering the ability to download the collected data from the platform in various formats to allow them to be easily imported into popular analytics applications such as Excel. This combines everything a survey platform should have in an easily accessible platform available to everyone.

Limitations

We understand that when an individual sets up an online survey, the only things they should focus on are the questions that they will be asking and the data gathered from their surveys. They should not be worried about the look of the survey and how intuitive they want it to be. Our product aims to address this issue. Our goal is to enable our users to create and manage their surveys and have an option to visualize the collected data through graphs generated using them.

Functional Requirements

- As a user, I would like to create a survey by adding questions and required input only.
- As a user, once I created a survey I would like to share the link to the survey on social media.
- As a survey participant, I would like to submit responses to surveys both anonymously and securely.
- As a user, I would like to see how many people submitted to each of my surveys
- As a user, I would like to view graphs based on participants' results

- As a user, I would like to change graphs by changing which variables have accordance to which axis.
- As a user, I would like to be notified every time n people have submitted survey responses.
- As a survey participant, I would like to share the survey I just submitted.
- As a user, I would like to input email addresses to people who I want emailed the survey link straight from the website.
- As a user, I would like to close a survey manually or set a date when creating the survey to automatically close the survey on that date.
- As a user, I would like the web application to be mobile friendly
- As a user, I want the option to sign up for an account so that my surveys aren't tied to any single device.
- As a user, I want the option to login and manage my account.
- As a user, I would like for there to be pre-defined survey templates.
- As a user, I would also like for there to be customizable survey templates.
- As a user, I would like for the data download to be easy to access.
- As a user, I would like for the data to be easily readable and understandable with different formatting options.
- As a user, I would like to be able to look at all my active surveys separately in a hub.
- As a survey receiver, I would like for the option to receive surveys in my email or on the application itself.
- As a survey receiver, I would like to receive/manage notifications for new surveys and get reminders for when the surveys expire.
- As a survey receiver, I would like for the survey interface to be user friendly and easy to fill out.
- As a survey receiver, I would like to be able to block certain users from sending me surveys.
- As a survey receiver, I would like to be able to see my progress on a survey as I am filling it out.

- ❖ As a survey creator, I want the option to have a centralized location for all my surveys.
- ❖ As a survey creator, I would like for the option to have access to all my statistical data gathered from surveys.
- ❖ As a survey taker, I would like to be able to view the creators of the survey and learn more information about them if they allow it.
- ❖ As a survey creator, I would like the option to bundle user emails under a mailing list to make it easy to send out future surveys to the same groups of people if necessary.
- ❖ As a survey taker, I would like the option to create an account to keep track of every survey I have answered

Security

Bearing in mind that surveys often ask sensitive information that people would like to answer anonymously, there rises a dire need for restrictions on what every user can view and create. Security is essential for our product. The survey data is made available only to the creators of the survey. To ensure that data is only accessible to the survey creators, we will employ user authentication to secure it. Survey responses will be made anonymous by default, with the option to allow the taker of the survey to state their credentials if they so like.

Non-Functional Requirements

Architecture and Performance

We are planning to develop the web application with the frontend and backend working together as a cohesive unit. This will allow us to divide our work while still making progress on the entire application itself as opposed to just a part of it. For the backend, we will be using the Flask web framework, utilizing Python to dynamically interact with the front-end of the application. We will also be using Firebase as our database application. Pyplot and a few other graphing libraries will be used to visualize the collected data. The frontend will employ HTML, CSS, and

JavaScript to create the structure for the web pages and survey templates, as well as jQuery and some other front-end frameworks for animations. We will be receiving and sending data via HTML forms.

Usability

The user interface should make it so that creating a survey and sending it out to a group of people is extremely easy to do. In addition, being able to download the results and analytics in separate file formats should also be made easy to understand. It is important to create a bridge between these two features for the user to understand that they are intertwined. For someone who is receiving surveys, it is extremely important for the surveys to be intuitive, eye catching, and easy to answer to increase the chances of him/her answering the survey. The front end for users and people who just receives surveys should be different as there aren't as many features required for people who are signed up to receive surveys only. Since this product is a web app, we will focus on making sure that all laptop and monitor screens are accommodated for and then work on mobile scaling as time permits.

Hosting and deployment

Initial versions of the application will be run on local servers on each of our computers, and shared using GitHub. When the application is release-ready, it will be deployed to Heroku for trial and use by the public.