- **Please make a copy before you edit it: File -> Make a copy.**
- **Please find the theme, problem statements and detailed template below.**
- **Please submit the final design document with an access link in the submission form.**

Girl Hackathon

Theme: Future of Learning

[Do not edit this section. This is read-only]

SUB THEMES OF ROUND 2

- **Digital Literacy and its Accessibility**

- **Hybrid Education**

Problem Statements:

Please use one of the below problem statements or come up with any other problem statement of your choice:

1. Majority of people in India still don't have access to the internet, and fewer still own a smartphone—Google has made India central to the Next Billion Users initiative—designed to ensure the internet is useful for people coming online for the first time. We are continuously working on improving our apps and services so they're relevant in more Indian languages and continue to create offline versions for those facing network constraints. Explore and enhance the features of existing applications or come up with a new application to improve **accessibility** in ways we can work together to improve lives of people living in rural areas and overall advance India's digital economy.

2. **Hybrid education** models are being adopted across educational institution-s post pandemic. As the name suggests, this model gives students the flexibility to attend classes in both online and offline modes. Since educators have a mix of online and offline students to address, various novel methods or tools for teaching need to be adopted. Monitoring, doubt sessions, intra student communication, grading group projects etc are getting tougher and a 'standard' solution to this problem needs to be identified. What features could help solve for the Hybrid education model in the current day and age.

3. Across the world, senior citizens who grew up in a pre-digital era, are finding it difficult to acclimatize themselves with the emerging technology. However, evolution of new technologies and applications can enable senior citizens to stay safe and secure. These days, senior citizens have already graduated to using smart phones

from landline or basic mobile phones but are largely using them to only make and receive calls. Rapid development in apps and websites which are user-friendly, can improve the safety of senior citizens if we can make them familiar with how to operate them through **digital literacy**. What features would you add to existing applications or come up with a new application to empower the reach to a larger audience of elderly.

Participants may either choose the above problem statements or may take inspiration from them and come up with something totally new. Goodluck!

Find Template to use below

2022 Girl Hackathon Design Doc Round: Project Submission

Project Name: **Milan**

Group Name: Discrete Coders

Group Members: Dewanshi Dewan, Asmita Zjigyasu, Oishi Seth

Brief summary

People living in remote areas are well aware of their issues but find it tough to resolve them owing to their lack of awareness about the correct terminologies and point of contact. Despite many government measures taken to create awareness among them, there is a problem of inadequate or wrong information flow. Our team is building an app - **Milan** to assist those people by providing them information from a reliable source. They will be able to access this app in the Indian language of their choice to facilitate easy usage. With the availability of information on six basic amenities- weather forecast, hospital availability, Prime Minister schemes, gas services, transportation, and postal services to the users, we can solve some of their daily-life issues.

Problem Statement

The theme we have chosen is broadly **accessibility** while also having parts focusing on digital literacy. While a relatively significant population of India has access to the internet there still remains a majority which has limited to no access to it and is suffering because of this. This problem of integrating technology into lives of the rural and underdeveloped parts of India is further increased due to the linguistic and cultural diversity of India wherein accessibility and digital literacy becomes a hard task if the said technologies are not intuitive enough to be used by illiterate or even older people and if they're only available in a language or two. **Digital literacy** is also thus a challenge to achieve in such places, something our app aims to improve by teaching people the right keywords and images to search for while browsing the internet on their own. The

aim is to make an easy and user-friendly app which is a one-stop application for solving most of their needs.

What -We are trying to build an app to resolve the everyday struggles of people in **rural India** who are **disconnected from the mainstream** and have very **limited knowledge** and access to technology. This aims to **make** their **life easier by** incorporating technology in **finding solutions to rural-centric problems.**

Why - Even though every year more households in the world are getting access to the Internet there remains a significant population in **rural India** which has limited to no Internet access and is **suffering** a lot **due to this disconnect** from the mainstream. Thus finding a **solution for accessibility** seemed to be of paramount importance to us which is why we came up with this idea to make this situation better across India.

For Whom - Our app aims to be used by the **people in rural India** from hardworking farmers, students, humble homemakers, older citizens and everyone in between.

Use Cases

This app will assist people who have less accessibility to basic necessities and awareness about advantageous opportunities such as government schemes or healthcare drives by serving them with necessary information. Thus, it is most beneficial for rural people and people living in remote areas of India irrespective of their gender, age or occupation.
Future scope of our app is to include towns and cities to cater to urban people by giving them a one-stop solution for all their needs.
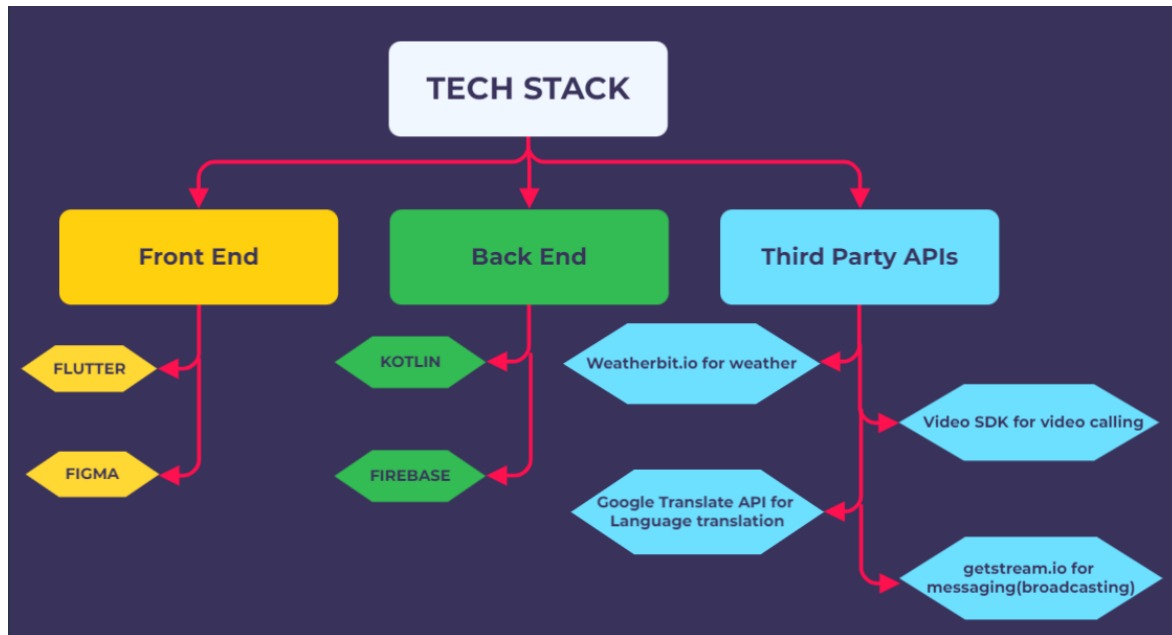
Design Idea and approach

We will include the following **components** in our application :-
- The app will be made available in the **selected Indian language**.
- Will provide **real-time weather** information of the selected location.
- Information regarding **Prime Minister schemes** will be made available along with redirecting to the official application portal for the same. **Expert** guidance will be provided if required.
- Details about **neighbouring hospitals and the specialisations** they offer will be provided. Expert guidance will be provided if required.
- **Commercial gas service providers** and their help-line numbers will be made available in the application.
- Available **transportation facilities** and commute timings will be displayed.
- **Postal** offices and **service** details will be offered in the application.

- We plan to use **video calls and voice calls** to help the users communicate with the Experts.
- There will be a **message broadcasting facility** for informing the people about government drives or other important events. Only members of the Panchayat or local government bodies will be given access as admins and only they will be allowed to broadcast messages to avoid wrong information flow.

Technologies that we will use while building the application are as follows:

As a **future scope,** we can expand our application to cover other needs such as:

- Nearby Anganwadi and schooling facility in the village for kids.
- Announcement of available job opportunities like contract based or farming based jobs for the villagers.
- For protection of farmers' interest, the application can inform the farmers about the market value stipulated by the government of India for their farm produce.
- Information about the nearby and reliable banking services can be propagated. Provision of creating and joining Self-Help Groups can also be added in the application.
- The application can be further expanded to be used by administrative officers to analyse and judge the problems and needs of people in rural India thereby working as a grievance portal.

The **rollout strategy** we have thought of currently but not limited to is the following:

- Firstly we plan to start with 3 target villages where we shall deploy our app and promote extensively to get the first set of users using our app. The location of the villages is preferably in Karnataka for now as we are based in Bangalore.

- For the promotion of the app and to gain the attention of the audience we are targeting, we are planning to take the help of the local government authorities which can help spread the word and information with the general public. Also administrative officials of the target villages will be asked to convey the information about the app with the people.
- Another way we will use to advertise is to put up advertisements on big billboards on roads as well as bulletins and notice boards in public areas and government offices where a large number of people visit on a daily basis. We will also use the radio stations to spread the word about our app.
- Lastly we will send teams to the areas of initial target villages that will interact with the people and educate them about the new app.
- If things go according to the plan then after the 3 villages we shall conduct a user study after accumulating enough user data and use it to enhance and scale the app before making it available in every nook and corner of India. Thus, after this the advertising shall be conducted on an even larger scale, by taking help from the government and even possibly using promoting schemes such as the ones we have seen to educate people on Covid appropriate behaviour and vaccinations.

What are your information **security / privacy concerns** and how will you address them?
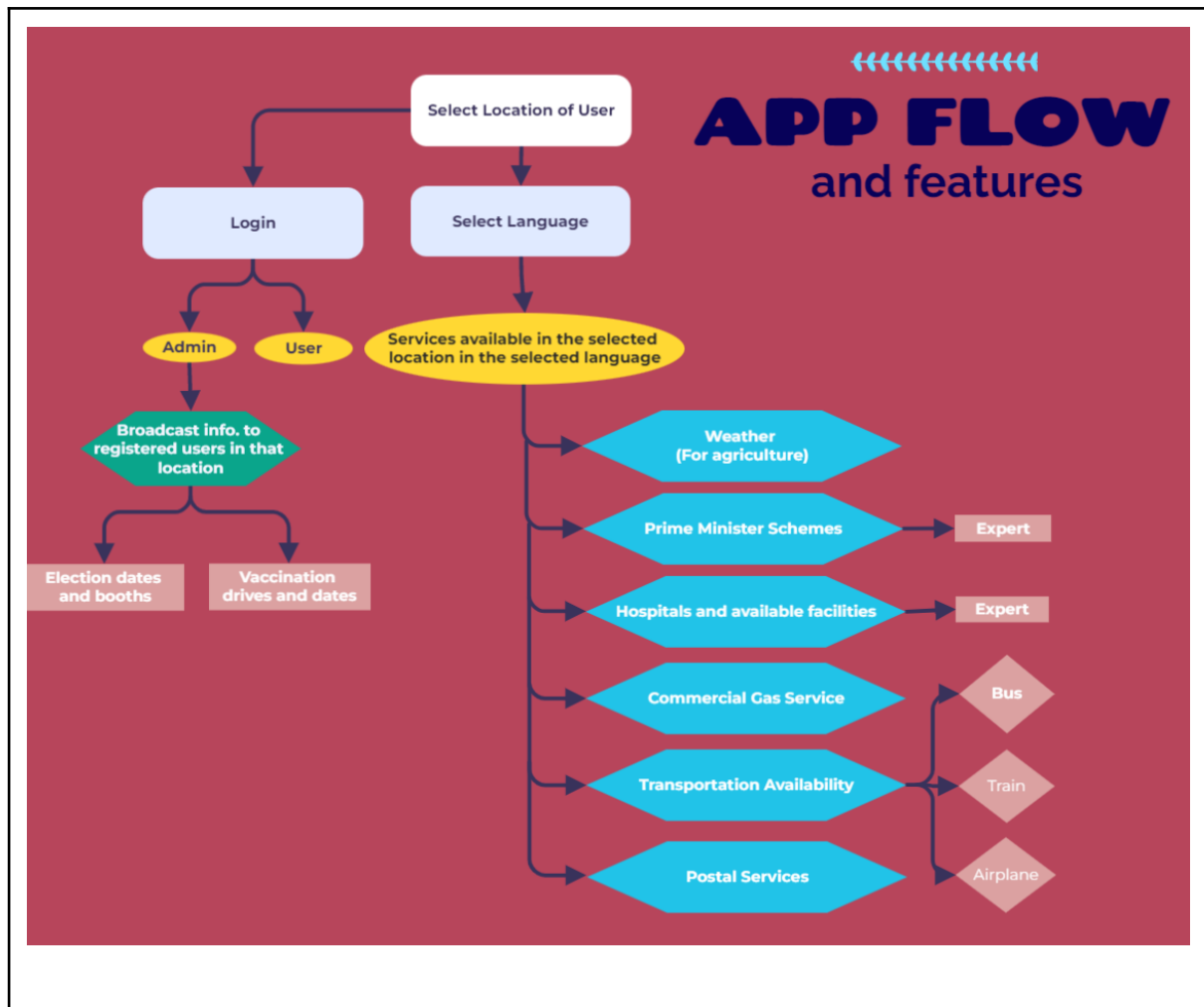Our main concern is keeping the login credentials of the Admin and the users safe.
We will aim to create a **secure user login facility** wherein the user data such as Name, age, location and sex will be stored in an encrypted manner to ensure no data leaks or breaches occur. Further for the future prospects we shall also look into using and deploying on the blockchain to ensure maximum privacy and security.

Alternatives considered

Alternative design idea that we had **considered was** making a **website** instead of building an application. We decided to forego the implementation of the website because we realised that searching for a website using a URL will be a tough task for those who are less educated or are computer novices. An **application will** prove to **be more beneficial** because once a user downloads it, it will be **easily accessible** to him/her.

References and appendices

Below is a flowchart to showcase the working of our application:

Thank you!