

Project Title: AnthroLink

LearnIT Girl'19 (11 March – 16 June)

Language: JavaScript

GitHub Link: <https://github.com/isha-gautam/AnthroLink>

1. Project Abstract:

Through this program, I plan to develop a web application to connect citizens to their nearest NGOs and/or regional recycling plants. A lot of plastic waste is generated at a household level which should not be sent out to the landfills but to recycling plants. The main features of my application are listed below:

- 1.1 This app will connect users to their regional recycling plants, and help them set up a pickup so they can dispose of their plastic waste responsibly.
- 1.2 It will also connect users to their nearest NGOs or such organisations, where they would be able to donate secondary resources like used clothes, remaining food, etc, which would further be distributed to the needy.
- 1.3 The app will also sync with the users' Google calendar and give them reminders about upcoming pickups.
- 1.4 The app can further be improved to set up a pickup for a whole society/RWA in addition to just a single citizen.

2. Project Goals:

Despite the availability of a number of facilities, citizens are not able to dispose their wastes responsibly, due to a number of issues like: lack of knowledge about recycling plants and/or donation drives by NGOs, lack of time to drop these wastes at suitable centres, etc.

The aim of this web application is to:

- 2.1 Set up a direct line of communication between the citizen and the nearest NGO and/or recycling plant.
- 2.2 Facilitate responsible disposal of plastic wastes, as well as secondary resources.
- 2.3 Do the aforementioned tasks in such a manner that it is of as little inconvenience as possible to both the parties involved.
- 2.4 Help in connecting citizens with authentic organisations.

3. Wireframes and Designs:

Design of the basic layout is added here -

(https://drive.google.com/drive/folders/1yi_Mia_YHS7tq_hNRpIfOJh0I6xER4x0).

4. Approach:

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The web app will have the following features:

4.1 Registration portal: Citizens, as well as the organisations register themselves on the web app using their Google accounts.

4.2 Profiles: After the registration a profile would be created for others to see. An individual holding an account can make an edit to profile by providing useful information that can be shared with others.

4.3 Ticket Generation: Citizen will generate a ticket to request pickup from an organisation. This ticket will either be rejected or accepted by the organisation. If accepted, the date for pickup will be updated in the Google account of the citizen, else the reason of rejection will be intimated to the citizen.

4.4 Storage: MongoDB which is a NoSQL database will be used to store information related to citizens and organizations. This database will hold all the data related to tickets too from its creation to acceptance or rejection.

4.5 Serving Web App: Express.js along with http/https module of Node.js will be used to develop the web application.

5. Future Work:

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5.1 To increase the connectivity between the citizen and the organization, a feature of a chat window can be incorporated in the portal.

5.2 The app can further be improved to set up a pickup for a whole society/RWA in addition to just a single citizen.

6. Challenges Faced/Learnings:

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6.1 The program is an online mentorship program, so any communications with my mentor needs to be done via calls or emails. This can sometimes cause misinterpretations on either of our parts. However, this particular experience has vastly improved my communication skills as now I'm able to explain my ideas more comprehensively even when not in discussed in person.

6.2 I did not have any experience in JavaScript whatsoever before this program, so at the beginning I was confused and intimidated by the terms used by my mentor. Thus, at time, it became quite a task to follow what he was saying, however he was patient enough to explain those to me. And as I started working in the language, it became easier for me to understand him, and use those terms myself.

6.3 As any student (and teacher) of our college would tell you, we have a lot of exams in our college, and so working on this project in addition to doing college work, was difficult. However, I have learned the precious skill of time management as a result, which I will cherish always.