Task 4: Describe the Feature

* **Feature Name:** Eco-Friendly Route Planner with Carbon Footprint Tracker
* **Purpose:** The idea is to get people to drive in a way that is better for the environment by letting them choose routes that cut down on carbon emissions.
* **Target Audience:** 
  + People who care about the environment and commute every day
  + People who use delivery and ride-sharing apps
  + Tourists that want to do good to the environment
* **Essential Features:**
* **Route Comparison:** Shows a lot of routes along with their expected carbon footprints.
* **Carbon Score:** This figure shows how much CO₂ is released based on traffic, vehicle type, and distance.
* **Green Recommendations:** Suggests eco-friendly alternatives like biking, carpooling, or taking public transit.
  + **Gamification:** Users get badges or points for making the more eco-friendly choice.
* **Problem Addressed:** The problem is that transportation accounts for a quarter of the world's CO2 emissions. Current navigation apps don't think about how their actions affect the environment; they just try to save time and distance. You can't see the users' carbon footprints. This application fills that gap and makes it easy for people to make smart choices.

Task 5: User Stories

* As a user, I want to see the carbon footprint for each route, so that I can make an eco-friendly choice.
* As a user, I want alternative transport suggestions (bike, carpool, public transit), so that I can reduce emissions.
* As a user, I want to earn rewards for choosing greener routes, so that I feel motivated to act sustainably.
* As a user, I want carbon emission data stored in my profile, so that I can track my eco-impact over time.
* As a user, I want offline route suggestions, so that I can still make decisions without internet.

Task 6: Breakdown, Effort & Pricing

| **Task** | **Hours** |
| --- | --- |
| UI Design (Route Comparison + CO₂ Info) | 8 |
| Carbon Calculation Algorithm | 12 |
| Integration with Mapping API | 10 |
| Green Suggestions (Bike, Carpool) | 8 |
| Gamification & Rewards Module | 6 |
| Data Storage & Profile Tracking | 4 |
| QA & Testing | 6 |
| **Total** | **54 hrs** |

Cost Structure: Rate per Hour: $30.   
The entire amount spent was $1,620. Justification: Contains the carbon emission algorithm, mapping API integration, UI/UX design, and simple gamification. It is inexpensive thanks to the MVP technique.

Task 7: Acceptance Criteria

* When the user chooses a location and sees the routes, each one should show the anticipated CO2 emissions.
* The system updates the user's eco-score when they choose a more eco-friendly path because the carbon computation logic is turned on.
* When a user searches for recent routes without being connected to the internet, the most recent carbon data should show up.
* When the user meets the goal of five eco-friendly trips, they get a badge as a reward.
* When a trip is over and the app has permission, it saves the route and emissions in the user's history.

Task 8:   
<https://green-path-finder-mobile.lovable.app>  
  
  
Task 9:  
These are the steps I used to make the Eco-Friendly Route Planner app prototype in Lovable.dev:

1. I logged into Lovable.dev and used the Start with AI tool to make a new app.
2. Entered a detailed prompt specifying:

* A Home screen featuring a search box for destinations and a button that says "Find Routes."
* A Route Comparison screen that shows three routes (Route A, Route B, and Route C) with estimated CO₂ emissions. The eco-friendliest route has a green emblem, and there is a button that says "Choose Green Route."
* A screen for Eco Route Confirmation that shows how much carbon the user has saved and a static Google Maps image to show how the map would look if it were integrated.
* A Rewards Dashboard panel that shows Eco Points, at least one badge (Green Traveler), and a progress meter for the next award.
* A navigation bar at the top with buttons for Profile, Explore, and Settings:
  + Profile: Shows placeholder for user info and eco-points.
  + Explore: Shows the text "Discover Green Routes & Eco Tips" along with pictures that have to do with the environment.
  + Settings: Shows choices for Notifications, Privacy, and Language, among other things.
* All screens have an eco-friendly green and white motif.

1. Made the app and changed the UI:
   * Added a static Google Maps graphic to show the journey in a more realistic way.
   * The wording and style have been changed to give it a fresh, modern look.
   * Buttons that are linked to one other to act like navigation between screens.
2. Made the prototype public and made a URL that anyone can use: <https://green-path-finder-mobile.lovable.app>

Task 10:

<https://docs.google.com/document/d/1FO_WeXACNvjoQtAGIol4X4BFlrrkcX310OXggtzlhk0/edit?usp=sharing>

Task 11:

https://eco-friendly-route-plann-679pnbr.gamma.site/

Task 12:

I did the following to make the pitch deck in Gamma:

* I signed into Gamma.app and chose "Create a New Deck" and then "AI Presentation."
* **I typed in the following command:**

"Make a professional pitch deck for an app feature called 'Eco-Friendly Route Planner with Carbon Footprint Tracker.'" Add slides for the title, the problem, the solution, the key features, the target audience, the market opportunity, the rewards system, the prototype preview, and the conclusion. “Use a clean green and white theme with icons and pictures that are good for the environment.”

* Used AI to make the slides, then changed the content:
* Added more information to the text for Problem, Solution, and Features.
* Added screenshots of the prototype from Lovable.dev to the Prototype Preview slide.
* Added a strong call to action at the end: "Ready to make every trip eco-friendly?" "Let's work together to make the future greener!"
* Used eco-friendly colors (green and white) and few icons to make the design consistent.

Published the deck and copied the link that anyone can share: https://eco-friendly-route-plann-679pnbr.gamma.site/