Vibe Coding Plan (Part of PRD)

💻 Vibe Coding Plan

We’re building a zero-backend static site, grab AI help and keep it vibey:

Sign into Visual Studio Code with your GitHub Account (RP)

Up the top select the copilot icon, then **Open Chat**, then change from **Ask to Agent**. Select the **Claude Sonnet 4** model. Claude Sonnet 4 is a very recent and powerful coding AI.

🎉 **Welcome Aboard!** Your Vibe Coding journey starts here—let’s make something awesome.

🚫 **No Copy/Paste** There’s no single “right” solution—craft it your way.

📘 **Use the Worksheet** It’s your guide; expect your path to look different from others’.

💾 **Enable AutoSave** Turn on AutoSave in VS Code now (highly recommended).

❓ **Hit a Roadblock?** Check the Hints doc in the lesson materials for pointers.

🔍Clarify & Configure

* 🔹 **AI Kickstart**: Prompt Copilot (Copy the brief from above):

|  |
| --- |
| *Create a new web site called ShoreSquad.*  *Analyze this product brief:*   * ***Project Name****: ShoreSquad* * ***One-Line Pitch****: Rally your crew, track weather, and hit the next beach cleanup with our dope map app!* * ***Why It Matters****: ShoreSquad creates value by mobilizing young people to clean beaches, using weather and maps for easy planning and social features to make eco-action fun and connected.*   *Suggest a colour palette that aligns with the brand's tone and target audience. Recommend JavaScript features for interactivity and performance. Propose UX design principles to enhance user experience, focusing on usability and accessibility.*  *Start by generating index.html (HTML5 boilerplate), css/styles.css, js/app.js, add Live Server config, and initial git setup with .gitignore for node\_modules and .DS\_Store.* |

* Wait while the AI goes to work. There may be periods where it appears nothing is happening. Many files and a lot of code is being created. Be patient.
* You may see different messages to what is covered in this worksheet. For this reason always review before clicking **Continue**. Note when it says **Run command in terminal** you can simply click **Continue** and it will run the command for you.

A screenshot of a computer

AI-generated content may be incorrect.

* Here it lists the files it has created so far and asks you to add them to a repo. Click **Continue**.

A screenshot of a chat

AI-generated content may be incorrect.

* Looks good so Continue again.

A screenshot of a chat

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* Now it asks to run the web site. Sounds good – **Continue**.

A screenshot of a computer

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* Now you get a list of everything that was done … It’s extensive.
* Finally let’s keep the changes that were made. Click on **Keep**

A screenshot of a computer

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* Now the fun part. Let’s see what happened. In the bottom right of VSCode, click Go Live. (Note you need the Live Server Extension first.

A screenshot of a computer error

AI-generated content may be incorrect.

* Once installed, Go Live



* Initial Web Site. Looks good. Even the colours are correctly representative.

A screenshot of a computer

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🧪 Prototype & Flow

* At this stage you have the basics completed. However it’s obviously USA based (Venice beach), is missing functionality and there are many things you probably want to fix.
* Let’s make sure everything is checked in and we have a repo on Github before continuing.
* Create a new repo on Github. See next page.

A screenshot of a web browser

AI-generated content may be incorrect.

* Click **Create Repository**
* Once created copy the "… or push an existing repository from the command line code.", then paste into your terminal in VSCode and run.

A screenshot of a computer

AI-generated content may be incorrect.

* Confirm in github. Remember you can press . to see the files.
* Work on the main page. The next step is show a map with the next location for a cleanup. But remember this is a static web site – there is no backend.
* Prompt copilot.

|  |
| --- |
| *Embed a Google Maps iframe into index.html for next beach cleanup spots. Currently the next clean up spot is Pasir Ris. The cleanup will begin at: Street View Asia 1.381497, 103.955574. Place a pin on the Google Map that indicates "Next Cleanup"* |

* That looks better, but remember to **refresh** your browser!

Hints on Refresh

| **Action** | **Cache Bypassed?** | **Typical Use** |
| --- | --- | --- |
| Refresh (F5) | ❌ No | Normal page reload |
| Shift + Refresh (Shift+F5) | ✅ Yes | Reload updated assets |
| Ctrl + Shift + R | ✅✅ Fully | Force clean reload, dev/debugging |

A map with a red pin on it

AI-generated content may be incorrect.

* In VSCode I now have a lot going on…

A screenshot of a computer

AI-generated content may be incorrect.

* These are both indications your file has been updated but not yet committed. You will also see the following in the chat. Simply press **Keep**.

A screenshot of a computer

AI-generated content may be incorrect.

* Let’s update our repo to ensure we don’t lose the Google map we just added

A screenshot of a computer program

AI-generated content may be incorrect.

* Ensure everything is in appropriate units. When finished Keep the changes.

|  |
| --- |
| *Scan the code and ensure everything is using metric units and degrees Celsius.* |

* However, there is a button on the Google map still reporting 72 degrees F. We need to fix that. When we look at the code we also notice it is static – it’s not calling the weather. So, we ask CoPilot to remove the weather button.
* By now you will realise the process is non-deterministic. My site

✅Integrate & Validate

* **Real API Swap**: In app.js, replace demo data with a real api call

|  |
| --- |
| *I need to put in a working weather prediction. It would be good if it was a 4 day or 7 day forecast nicely formatted. I want to use o NEA’s Realtime Weather Readings API from*[*https://data.gov.sg*](vscode-file://vscode-app/Applications/Visual%20Studio%20Code.app/Contents/Resources/app/out/vs/code/electron-sandbox/workbench/workbench.html) |

* **Things you may see:** When swapping in a real API

A screenshot of a web page

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A screenshot of a computer program

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A screenshot of a computer program

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Because the process is not deterministic, you will get a different result to what is shown here. But I

📦Refine & Ship

* 🎨 **Style It**: Tweak CSS for layout and visual polish.
* 🛡 **Robustness**: Add JS try/catch, user feedback (loading spinners, error messages).
* 📄 **Docs & Comments**: Update README with instructions on Live Server and usage.
* 🚀 **Deploy**: Push to GitHub and enable GitHub Pages for free hosting. GitHub Page settings are shown below.

📆 Milestones & Level Ups

🔹 **Week 1: Setup & Beachy Skeleton**

Create index.html, css/styles.css, js/app.js with HTML5, CSS3, ES6+. Add Tawk.to snippet and Google Maps iframe placeholder. Set up .gitignore and Live Server. Commit to GitHub (git add . && git commit -m "ShoreSquad skeleton").

🔹 **Week 2: MVP with Mock Vibes**

Build UI with mock weather data (e.g., temperature, rain), Google Maps iframe (East Coast Park), and Tawk.to chat widget. Style with beachy colors (blues, yellows) for Gen-Z appeal. Test on Live Server.

🔹 **Week 3: Real API & Squad Chat**

Swap mock data for NEA’s Realtime Weather API (https://api.data.gov.sg/v1/environment/24-hour-weather-forecast) using JSONP. Embed Google Maps iframe for cleanup spots. Test Tawk.to chat and error handling (try/catch) in Chrome DevTools.

🔹 **Week 4: Polish & Launch Party**

Minify JS/CSS for <1s load on 4G. Add loading spinners, error messages, and mobile-friendly UI. Update README.md with setup (NEA API, Tawk.to, Maps). Deploy to GitHub Pages (git push origin main).

🧪 Test It!

* **Weather Vibes**: Check NEA API displays temperature and rain for Singapore beaches (e.g., Sentosa) on mobile.
* **Map Check**: Confirm Google Maps iframe shows cleanup spots (e.g., Pasir Ris Park) and zooms correctly.
* **Squad Chat**: Test Tawk.to widget—send messages, ensure it pops for youth users.
* **Impact Tracker**: Verify static JSON tracker shows trash collected (e.g., “10kg @ East Coast”).
* **Mobile Party**: Test on Chrome/Safari (iOS/Android) for responsiveness and <1s load on 4G.
* **Customize**: Add beachy emojis 🌊 or Singapore slang (“lah!”) to UI for extra Gen-Z flair!

A screenshot of a web page

AI-generated content may be incorrect.