Mobile Autonomous Database

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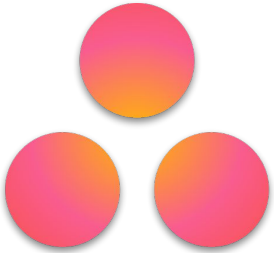
Mobile Autonomous Database

Asana

Purpose: To **organize and manage** all project requirements and equally **assign tasks** to each individual in the group.



asana

Our ranking for Asana is:

3/5

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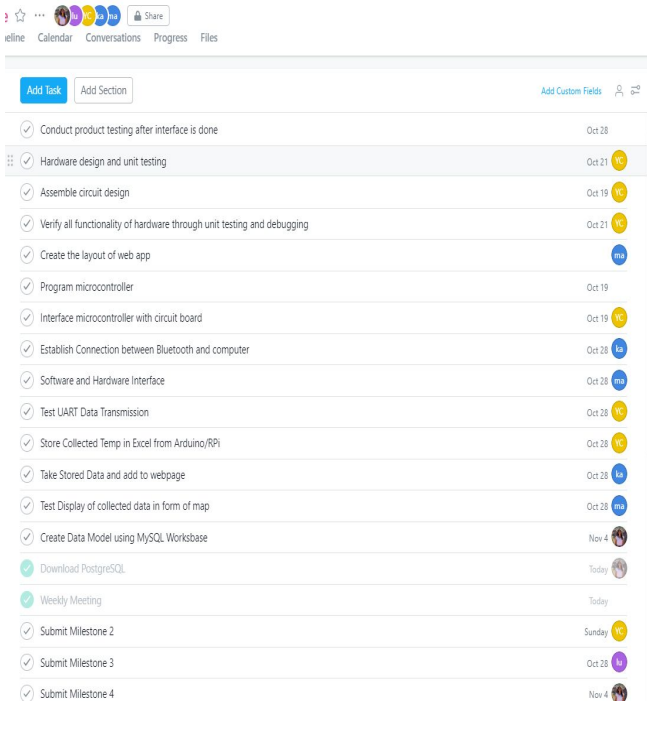
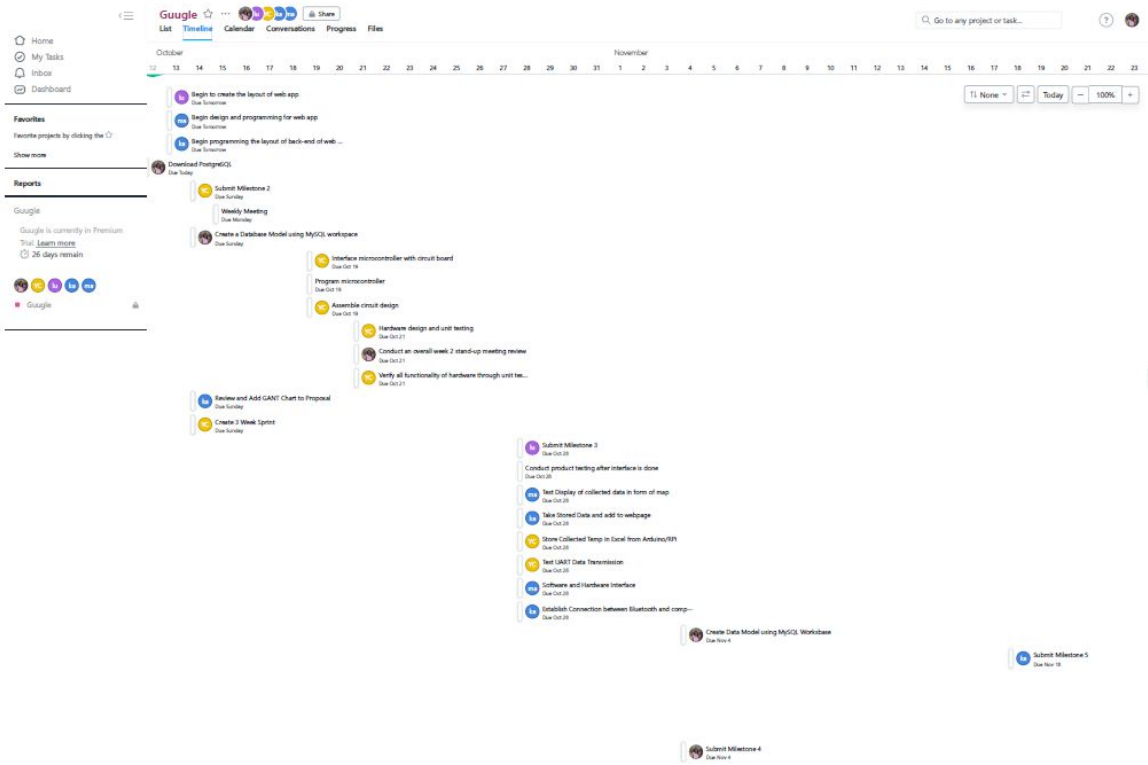
Asana Workflow





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Slack

Purpose: To **communicate** efficiently through online instant messaging

Our ranking for Slack is:

2/5

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Github

Purpose: To quickly update and add project components to a repository so that **everyone in the group** is able to download and use each file in real time.

Our ranking for Github is:

5/5

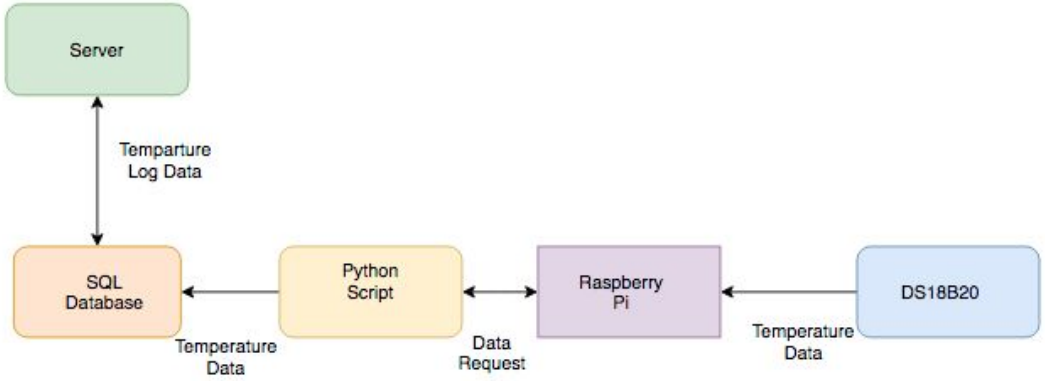
SQLite3

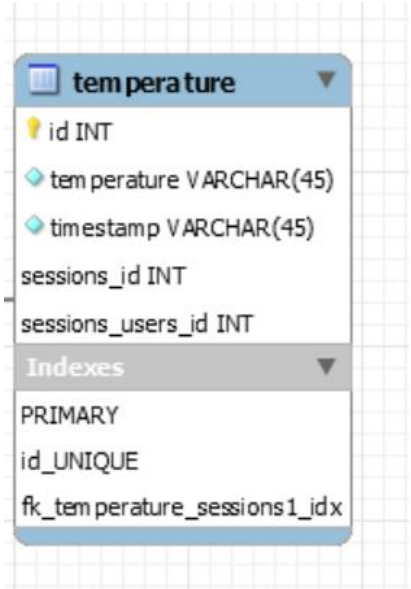
Purpose: **Lightweight** database that is able to run and update on the Raspberry Pi 3 in **real time.**

Our ranking for SQLite3 is:

4/5

SQLite Workflow





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[Travis CI]

Purpose: To conduct **Python unit tests** on specific features of our app and make sure they are working as they should, through **continuous integration.**

Our ranking for Travis CI is:

4/5

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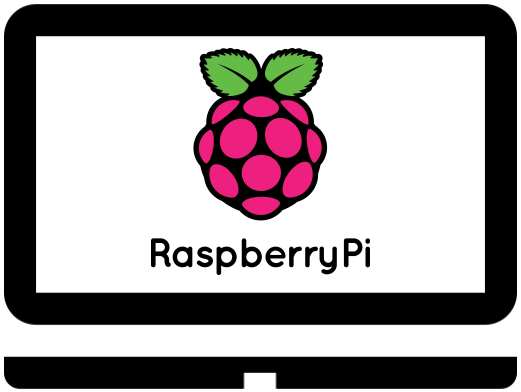
Development Environment

Purpose: We used a **local environment** on the **Raspberry Pi 3**, which contains the server, the database, and the code to connect to HTML.



Our ranking for the Raspberry Pi environment is:

4/5

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Lessons Learned

Compatibility with hardware

- There was an issue where we had to use 3 separate applications to transfer data from hardware to the web app.
  - This issue could have been mitigated by researching what specifications were needed for this project.
  - We ended up using the Raspberry Pi 3, because it has Wi-Fi capability.

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Lessons Learned

- Assigning Tasks
  - Know each team member’s strengths
- Don’t reinvent the wheel
  - APIs and tutorials
- Share your resources with team members
- Communication is Key
- Ask a knowledgeable peer, reduce time-to-prototype

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Project Management Method

Agile Management

- We were adaptive with our project development.
- For example, when we had an issue with the Arduino we were able to quickly make the changes needed to get our project back on track.
- Sprints based on each milestone

Project Demo