Portal for CUBY Space Camp

Development proposal for a 4-person team.

The need for space engineers is imminent. Our intention is to empower students and enthusiasts, to begin with a hands-on experience to be able to assemble a cube satellite that replicates the functionalities of an actual cube satellite. The entire setup shall be supplied in the form of a Do-It-Yourself (DIY) kit, which shall provide an inexpensive experience of developing a satellite at one’s convenience. The kit has been christened as CUBY.

The DIY kit includes 2 components - hardware and software. The participants are required to build the software component. The software solution (here : portal) provides access to a dashboard, forum discussion and other add-ons required to serve as a one-stop-shop user experience for all those who possess the kit or are interested to start exploring.

Participants are required to sign NDAs (Non-Disclosure Agreements).

What needs to be done?

Build and implement the CUBY portal with the following modules:

- **Single-Sign-On**.
- A **forum**.
- A secured front-end shell for the portal (**React/Angular/Vue**).
- CUBY specific:
  - Team formation (**invitation links, and basic management**).
  - Kit registration (**to link customers and verify kit purchases**).
  - API to receive kit data securely (**from the development board**).
  - **Grafana** dashboard (**to visualise received data**).
- A back-end (**with database**) to store customer and application data.

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References

Facebook  
[Cuby Space Camp](#)