**Denbu – Engineering Assignment**

This assignment has two tasks – a webapp and a mobile App. Each of them will be evaluated separately. Of course, we will be looking for the basics in App/front end development, but the key metric that we want to see in you is how adaptable you are when designing your solution.

Adaptable here means being open minded to new technologies, hacking your way to make things work, knowing where to look for solutions on the internet. This is a startup, so you will be a person of many hats – learning new technology and using it for the first time

**Task 1 – Interactive Webapp**

Enable users to interact with a Vector image.

Think of it like building a character in a game. There is a base skeleton and then you add or remove skins/items by interacting with the character itself & an items panel on the side.

Another example would be a whiteboard tool like Miro.

**Requirements**

* Any Base Image/visual of your choice
  + Image is clickable
  + Hover on the image to invoke a slight animation on the image
* Have a button on the side which can be used to add content to the base image
* Users should be able to interact with the newly added section
  + Able to click on the newly added section to open a pop up which can then be used to remove the newly added section, bringing back the image to base version

e.g., man -> man with a hat -> man.

Note - The image can be as basic as a simple circle. **We just want to see how you go about providing user interactivity**

**Task 2 – Mobile App**

Create a mobile App that use Bluetooth in the device to communicate with other Bluetooth enabled devices

**Your App should**

* Scan for Bluetooth peripherals
* Connect/Disconnect to the Bluetooth peripheral
* Display data from the Bluetooth peripheral & Send data to the peripheral
* Use simulators for Bluetooth peripheral (e.g., light blue app in your laptop or another phone)

**Deliverables**

* A zip works or a private GitHub/bitbucket repo URL.
* Mention any non-trivial installation details in a README (text/markdown) file in the root of your directory.
* For extra points – add test cases

**Ideally we want a fully working solution, but the approach also matters. So submit even if you do not finish it. Your goal is to impress us !**

Feel free to contact us for any questions regarding the assignment