

## **Pest Detection App-**

### **Backend Functionalities Required -**

- 1) User Auth
  - a) User Login (OTP based login; don't send OTP just return as response in the api itself)
  - b) User Signup (Name, DOB, Company, Email, Mobile)
- 2) Pest Detection Api
  - a) Api should take an image and return a corresponding pest detection ratio for a pest(static random 0-1 value) eg. - `{{{pestName: "blue flies" , detectionRatio: 0.8},{pestName: "black flies" , detectionRatio: 0.3}}}`, imageUrl: ["http://abc.com/image1"](http://abc.com/image1)
  - b) This api should be used only by authenticated users
  - c) Rate Limitation should be possible based on userId .
- 3) Get All Searched Images
  - a) Api which will return all the searched images and their results
  - b) Filtering should be possible(Think which filters make sense and should be implemented)

### ***Additional Functionalities -***

- 1) Write Test cases
- 2) Using multiple databases if required
- 3) **REST Apis**
- 4) Using Reusable and modular code

### **Frontend Functionalities Required -**

- 1) User Login and Signup Page
- 2) Tile based gallery to view all past images
- 3) Filters
- 4) Pest Detection module
  - a) File upload
  - b) File upload progress bar
  - c) Uploaded File Preview
  - d) Result View snackbars - pestName and detectionRatio

### ***Additional Functionalities -***

- 1) Proper Error handling and Displaying proper errors based on api response
- 2) Extra points for using Redux for state Management
- 3) Responsive UI for gallery View

We Expect the code to be uploaded on git. Use git for the entire production.