

Estimate the Crop Yield using Data Analytics

Project phase II-Solution Requirements

Functional Requirements:

Functional requirements are product features or functions that developers must implement to enable users to accomplish their tasks.

- **User Installation** - User can install the app from Google play store or from the website.
- **User Registration**-User can create an account by registering through form or gmail
- **User Confirmation**-Confirmation via Email, OTP or SMS.
- **User Login**-User should login the app with the user name and password or easier login for already existing users.
- **Data Collection**-The previous year crop yield data set and the farm yield methodology, User data of the farmer, Details of the Seasons and the Regions.
- **Data Analysis**-The analysis is done on the given data to gain useful insights on the crop yield and also the data according to the set of past data of the multiple farmers.
- **Estimation**-Creating the perfect data module through attractive stories, dashboard and reports to increase the understandability of data.

Non-Functional Requirements:

Nonfunctional requirements not related to the system functionality, rather define the system should perform.

- **Usability**-The given datasets, analyzing is done and report is created. Accordingly sowing of crops are recommended. The features of this dashboard is all the data which is needed will be displayed in one which is easily understandable.
- **Security**-Only recognized users can access the resource. Not all the users are allowed to access any particular or whole data from dashboard.
- **Reliability**-Using the interactive data visual dashboards we can easily understand the data reports and the added/erased dashboard will be retrieved soon.
- **Performance**-Interaction makes better performance between all user and impressing by the visual advise.
- **Availability**-The dashboard is easily available and accessible in smartphones and PC's and laptops.

- **Scalability**-The flexibility of the methodology to implement the proposed solution is very easy that can make increase in the estimation of crop yield in the differ farms for different user. It has the high database storage so that the data stored can be viewed and retrieved anytime, anywhere.