

Progress Presentation-I

e-Yantra Summer Internship-2017

Development of GH farm-produce Web Monitoring System

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Overview of Project

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Overview of
Project

Overview of Task

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Task
Accomplished

Challenges Faced

Future Plans

Thank You

Development of GH farm-produce web monitoring System

■ Objective:

- 1 To design a web portal to be used for monitoring and keeping a record of vegetable produce in the greenhouse.
- 2 To establish communication between the weighing machine and a server and save pre-defined characteristics of the vegetables like quantity(according to the weight), its image etc in the database and update the same on the web portal.

■ Deliverables:

- 1 Creating User and Developer manual.
- 2 Report and Presentation

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Task.no	Task	Deadline
Week 1		
1	Learn Raspberry Pi	2 days
2	Understanding the current system of the GH farm-produce	1 day
3	Weighing machine ethernet connection with localhost .	2 days
4	Study python	1 day
Week 2		
5	Javascript, Ajax and Bootstrap and installing Django on the system and backend	2 days
6	Designing a Login web page for all type of user using Django Framework	1 day
7	Creating Web interface showing the data like image and name of vegetable/fruit, weight in grams, price,Add to cart etc that is logged by the producer i.e Integrating these pages with the database .	3 days

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Task.no	Task	Deadline
Week 3		
8	Create Master page and maintain proper designing throughout the website	2 days
9	An option for Add to cart,will be given to produce and its entire functionality to order the product.	3 day
Week 4		
10	In Admin Section:Create page to give access to users and create new users(producer) for Admin.	2 days
11	In producer section:Create page showing all details of products & make provision to modify the details if necessary	1 day
12	Add notification feature for further production from the farm	2 days
Week 5		
13	Generate Various reports as discussed above to get the customised details of the data of the things produced in thefarm .	4 days
14	Reciprocate this project localhost to server	2 days
Week 6		
15	Make Website fully functional	2 days
16	Create user and developer manual	3 days

Task Accomplished

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- Establishing communication between raspberry pi and server and inserting data into the database
- Designing database schema for the project
- Developing login page for different users (Admin, Consumer, Producer)
- Showing produce log with images for each producer

Challenges Faced

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- Django architecture:
Django is based on the Model-View-Controller(MVC) architecture. Since we have never worked with it before it took time to understand the architecture and how to set up our project with it to make optimum use of the architecture.
- Communication between raspberry pi and Server:
We earlier used tcp socket server for communication which had the drawback of deadlock condition. We changed the entire architecture of the client-server communication to make use of the better RESTful API. This solved the problems we had about of having to run two servers, since Django supports REST API. This has also made the communication free from deadlocks and also the code can now be easily changed to communicate with any other server.

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- Develop web interface to provide consumer the option to add items to cart and purchase products currently available.
- Creating reports in form of charts which describe different statistics and analytics.
- Adding Option to download said reports as excel or pdf files, further reducing manual load.
- Adding notification feature for new farm produce and orders.
- Setting Up the website on an actual server.

Thank You

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THANK YOU !!!