A Mini Project Report on

Online Nursery Plants Shopping System

S.E. - I.T Engineering

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CERTIFICATE

This to certify that the Mini Project report on **Online Nursery Plants Shopping System** has been submitted by Vinayak Somvanshi (20104003), Kevin Thakkar (20104023), Raj Solkar (20104087) and Aman Yadav (20104050) who are the students of A. P. Shah Institute of Technology, Thane, Mumbai, as a partial fulfilment of the requirement for the degree in Information Technology, during the academic year 2021-2022 in the satisfactory manner as per the curriculum laid down by University of Mumbai.

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Chapter 1

Introduction:

A nursery is a place where plants are propagated and grown to a desired age. They include retail nurseries which sell to the general public, wholesale nurseries which sell only to businesses such as other nurseries and to commercial gardeners, and private nurseries which supply the needs of institutions or private estates. Nurseries may supply plants for gardens, for agriculture, for forestry and for conservation biology. Still people feel an inconvenience to get out their comfort zone and purchase plants. Moreover, the availability of the products maybe scarce. The main aim of this project is to develop a software for purchasing plants online from comfort of their homes or anywhere else. In this project, we provide a vast variety of plants over various categories to buy from and deliver it to their doorsteps. This will provide online shoppers with an interface through which they will be able to purchase plants from formal and informal merchants. The process of buying plants will become more convenient for people.

1.1 Purpose:

There is always a need of a system that will perform to purchasing products online according to occasion. This system will reduce the manual operation required to purchase products online. Main concept of the project is to provide plantings as per the customer's requirement. Hence this software can be used in any nursery store to maintain their record easily. The online nursery shopping is aimed at developing an application that depicts online shopping of various type of plants. Online nursery shopping is one of the applicants to improve the marketing and sales of the products. This application involves all the basic features of an online shopping system.

1.2 Objectives:

- To allow user to shop for plants comfortably anytime and from anywhere.
- To provide cheap and evergreen plants to customers.
- To encourage people to purchase plants by making them aware about their benefits.
- To make customer capable of ordering plants online instead of buying them physically.

1.3 Scope:

1. **Can be used to expand online business for various nurseries.**

   Buying plants can be tedious and with the help of our shopping systems consumers will be able to buy plants from various nurseries and shops. This will provide online shoppers with an interface through which they will be able to purchase plants from formal and informal merchants. Connecting different merchants to one another will provide opportunities for both the merchant as well as consumer. After purchasing the products, the consumer reviews and through word-of-mouth businesses will be publicized and that will help in growth of trivial businesses.

2. **Functionalities of this system can be applied in other shopping systems.**

   The project has a wide scope, as it is not intended to a particular organization. This project is going to develop generic software which can be applied by any business organization. Various features like customer login, product details, cart system, payment gateway, etc. can be used in different shopping systems as well which will provide compatibility with various systems. Also, the software is going to provide a huge amount of summary data.

Chapter 2

Problem Definition:

Many people want to buy plants and they directly concerned to the nursery and buy the plants but sometimes people don’t know specific information about particular plant items as well as seller which are not technically skilled. Customer does not compare plant price with other shopkeepers at the same time. In nursery there is no facility for online payment only cash may be consumed. We cannot purchase plants through online mode. Limited customers reached to the nursery because sometime customer need to travel for long distance as nursery is far from their home. The system has the provision of orders entered by the clients along with their contact detail, grading specifications, special services, job code and amount of request. After an order is entered, an order confirmation report will be sent to the client for review. When all orders have been entered, a surplus for sale report will be created.

Chapter 3

3.1 Proposed System

The aim of the project is to develop an application for purchasing plants online. The proposed system can overcome all the limitations and errors of the manually purchasing plants.

The system provides proper security and reduces the manual work.

- Security of Data
- Ensure data's Accuracy
- Greater efficiency
- Better services
- Minimum time required
- Wide Variety of Plants
- Secure Payment Transactions
- Free and Fast Delivery
- More Advanced Feature

3.2 Features and Functionalities:

1. **Sign in/ Sign up/ Forget password:**

   User can be able to login the system and if the user is new, he/she should signup first with credentials first. If the user forgets password his/her password they can reset it with their username and password. This provides the information of the user and acts as a security to the data. The user can register and use the software.

2. **Display all the categories available for shopping on the system's main page:**

   The user can choose the required category of plants which are available on the system's main page. The categories vary from decorative flowering plants to beneficial medicinal plants and all in between. This will ensure that the user could choose a product easily without hassling through a humongous list of products.

3. **Allow the user to see the detailed description of a particular product:**

   User has to know what exactly they are buying and this is fulfilled by the detailed description of product. Along with the information about the plants user can also note the caring tips for plants such as fertilizers required and amount of water and sunlight required by an individual plant.

4. **Cart:**

   Once the user has found their ideal plant, they should be able to save them to a cart. User can simply add the product to the cart and continue shopping for more. After the desired number of products has been added to the cart the user can check out at once.

5. **Payment Gateway:**

   After checking out the user has to pay the appropriate amount as per his purchase, which can be done through the payment gateway provided. The payment can be done through various transition methods viz UPI, Net banking, Mastercard, VISA, etc.

Chapter 4

Project Outcomes:

- User can purchase plants according to his\her\their needs.
- User is able to login and signup and if in case can use forget password to change their password.
- Only Registered users can use the software.
- User can order plants from various categories.
- User can add the products to the cart.
- Users can check out with the products once added them to the cart .
- User can pay for the plants through the payment portal.

Chapter 5

Technology Stack:

- **Front End:**

  Frameworks: Tkinter:

  Tkinter is the standard GUI library for Python. Python when combined with Tkinter provides a fast and easy way to create GUI applications. Tkinter provides a powerful object-oriented interface to the Tk GUI toolkit.

  Creating a GUI application using Tkinter is an easy task. All you need to do is perform the following steps −

- Import the *Tkinter* module.
- Create the GUI application main window.
- Add one or more of the above-mentioned widgets to the GUI application.
- Enter the main event loop to take action against each event triggered by the user.

- **Back End:**

  Programming language: - Python 3.10-amd 64

  Python is a high-level general-purpose programming language. Its design philosophy emphasizes code readability with the use of significant indentation. Its language constructs and object-oriented approach aim to help programmers write clear, logical code for small- and large-scale projects.

  Python is dynamically-typed and garbage-collected. It supports multiple programming paradigms, including structured (particularly, procedural), object-oriented and functional programming. It is often described as a "batteries included" language due to its comprehensive standard library.

  Guido van Rossum began working on Python in the late 1980s, as a successor to the ABC programming language, and first released it in 1991 as Python 0.9.0. Python 2.0 was released in 2000 and introduced new features such as list comprehensions, cycle-detecting garbage collection, reference counting, and Unicode support. Python 3.0, released in 2008, was a major revision that is not completely backward-compatible with earlier versions. Python 2 was discontinued with version 2.7.18 in 2020

  Database: MySQL

MySQL is the most popular Open-Source Relational SQL database management system. MySQL is one of the best RDBMS being used for developing web-based software application

- **Development:- PyCharm 2021.3 & IDLE (Python 3.10 64 bits)**

PyCharm is a source-code editor made by Microsoft for Windows, Linux and macOS. Features include support for debugging, syntax highlighting, intelligent code completion, snippets, code refactoring, and embedded Git. Users can change the theme, keyboard shortcuts, preferences, and install extensions that add additional functionality.

IDLE (short for Integrated Development and Learning Environment)[1][2] is an integrated development environment for Python, which has been bundled with the default implementation of the language since 1.5.2b1.It is packaged as an optional part of the Python packaging with many Linux distributions. It is completely written in Python and the Tkinter GUI toolkit (wrapper functions for Tcl/Tk).IDLE is intended to be a simple IDE and suitable for beginners, especially in an educational environment. To that end, it is cross-platform, and avoids feature clutter.

Chapter 6

Project Design:

In this phase, a logical system is built which fulfils the given requirements. Design phase of software development deals with transforming the client's requirements into a logically working system. Normally, design is performed in the following in the following two steps:

1. Primary Design Phase: In this phase, the system is designed at block level. The blocks are created on the basis of analysis done in the problem identification phase. Different blocks are created for different functions emphasis is put on minimizing the information flow between blocks. Thus, all activities which require more interaction are kept in one block.

2. Secondary Design Phase: In the secondary phase the detailed design of every block is performed. The general tasks involved in the design process are the following:

- Design various blocks for overall system processes.
- Design smaller, compact and workable modules in each block.
- Design various database structures.
- Specify details of programs to achieve desired functionality.
- Design the form of inputs, and outputs of the system.
- Perform documentation of the design.

User Interface Design: User Interface Design is concerned with the dialogue between a user and the computer. It is concerned with everything from starting the system or logging into the system to the eventually presentation of desired inputs and outputs. The overall flow of screens and messages is called a dialogue.

The following steps are various guidelines for User Interface Design:

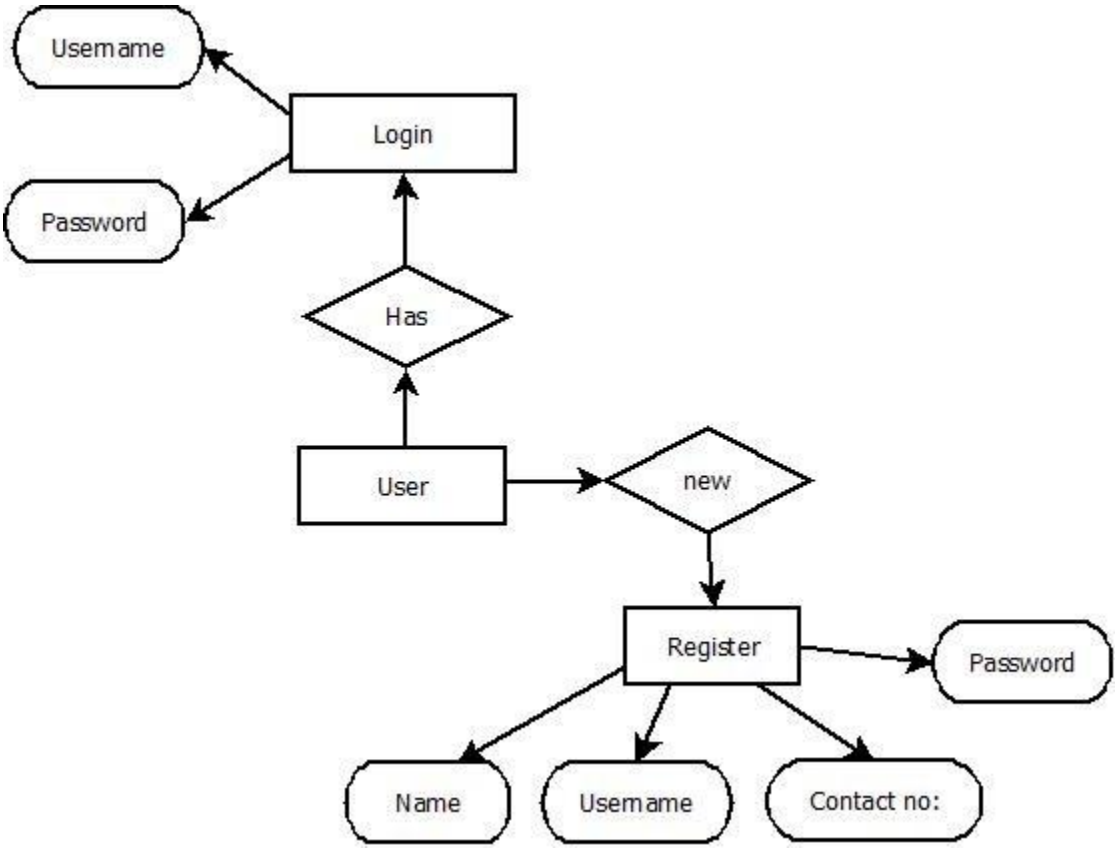
- The system user should always be aware of what to do next.
- The screen should be formatted so that various types of information, instructions and messages always appear in the same general display area.
- Message, instructions or information should be displayed long enough to allow the system user to read them.
- Use display attributes sparingly.
- Default values for fields and answers to be entered by the user should be specified.
- A user should not be allowed to proceed without correcting an error.

- The system user should never get an operating system message or fatal error.

Chapter 7

E-R Diagram

A database management system (or DBMS) is essentially nothing more than a computerized data-keeping system. Users of the system are given facilities to perform several kinds of operations on such a system for either manipulation of the data in the database or the management of the database structure itself. E-R model stands for an Entity-Relationship model. It is a high-level data model. · It develops a conceptual design for the database. It also develops a very. The Below E-R Model is the representation of Speech Notes (Speech to Text Converter).



Chapter 8

Implementation:

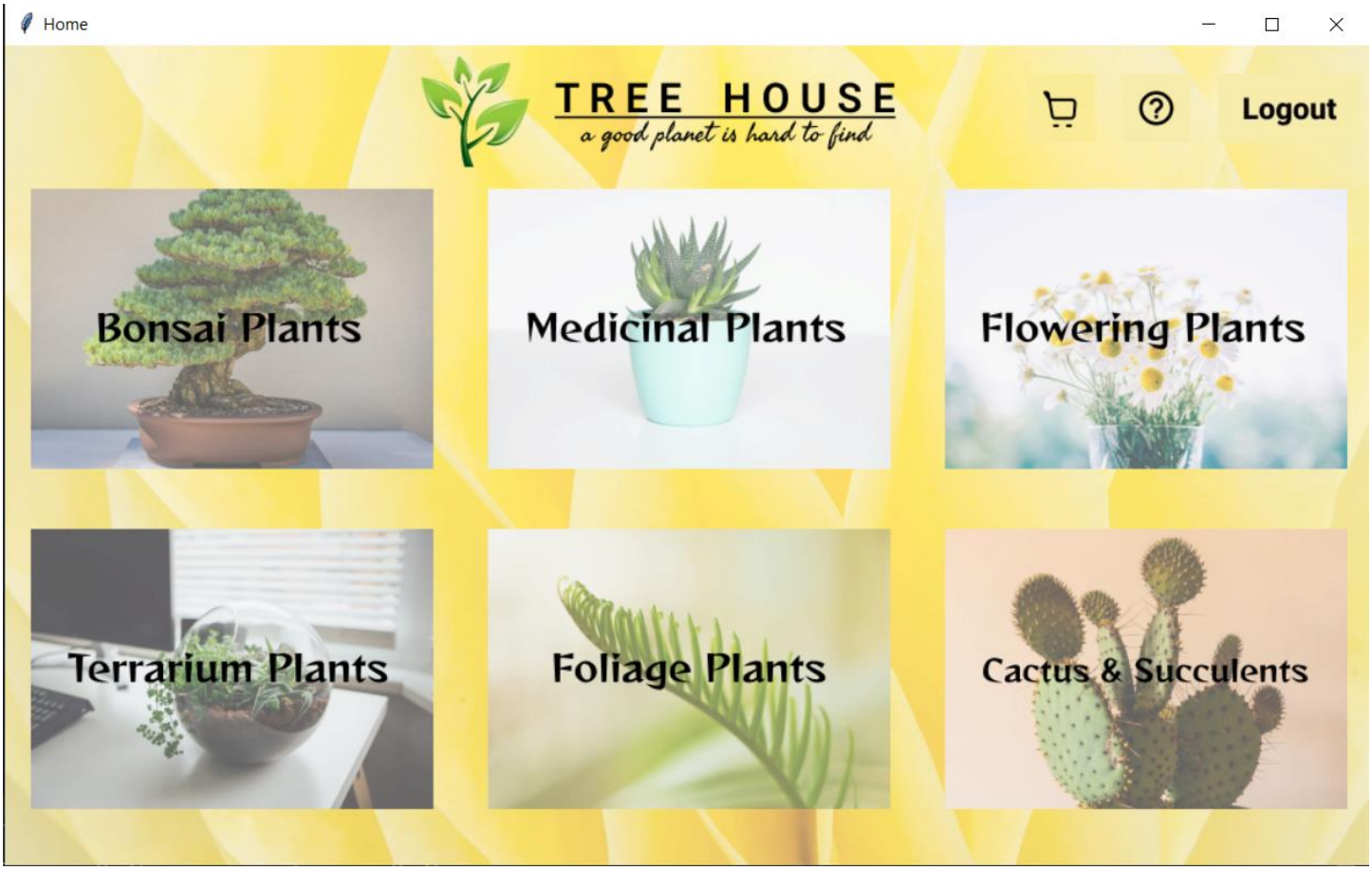
The following is the implementation of our project:

Login Page

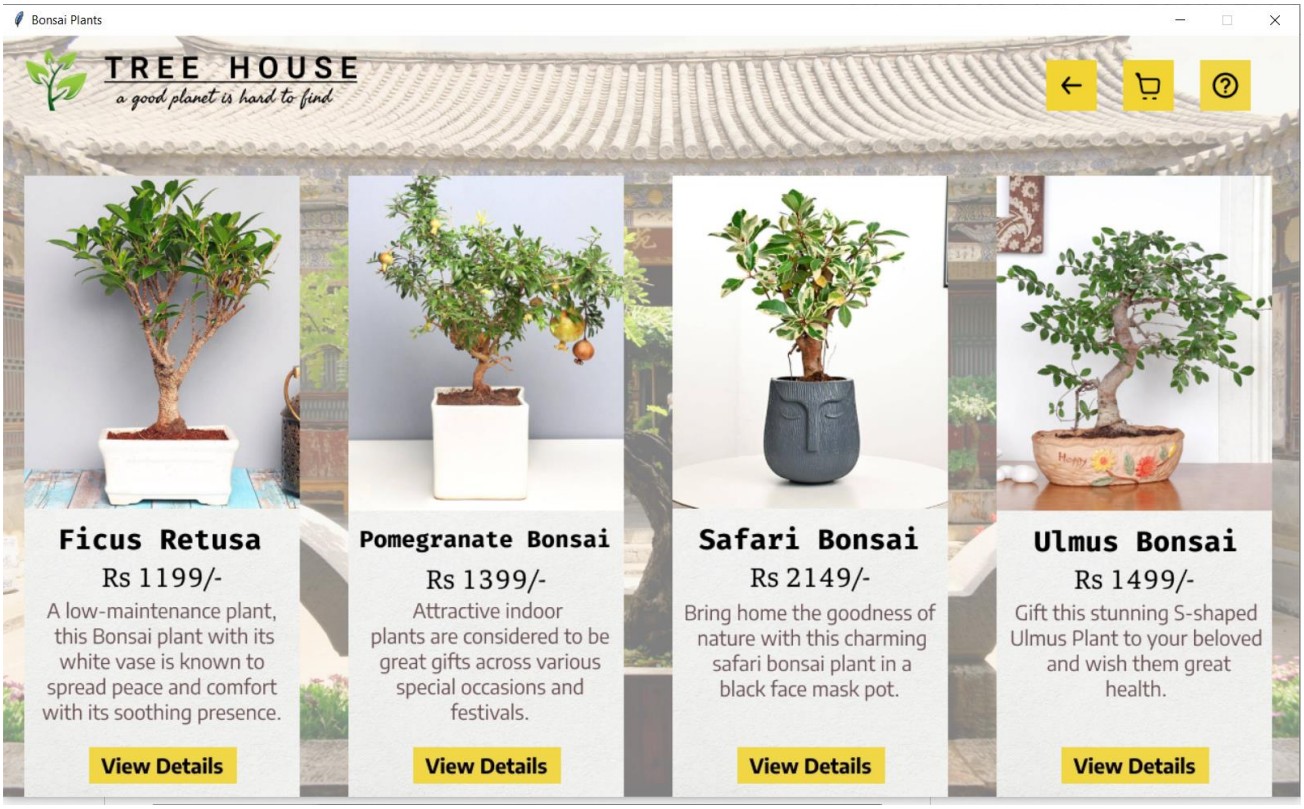
Authorized Users can use the software through the login page by using their username and password.

Signup Page

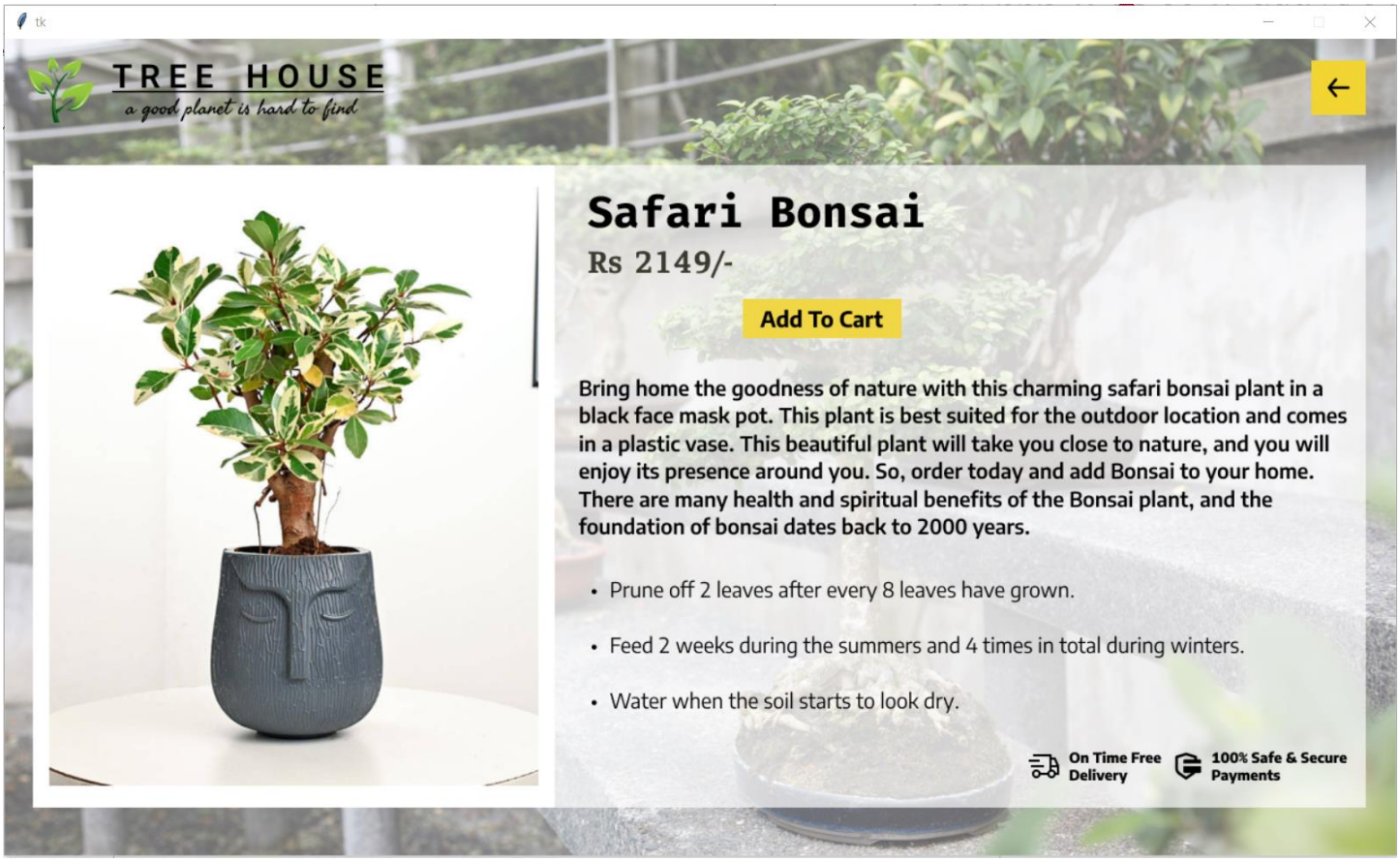
Users can get themselves enroll themselves in the software by adding their details and thus get registered.



Homepage



Plants Page



Plant's Details Page

Chapter 9

Project Scheduling

Sr. No	Group Member	Time duration	Work to be done
1	Vinayak Somvanshi	1st Week of February	Implementation of Home Page, Categories, Plant Details Pages, Forgot Password and Database Connectivity
2	Kevin Thakkar	2nd Week of February	Implementation of Login, Registration and Integrating pages, Payment Portal and Database Connectivity
3	Raj Solkar	1st Week of March	Implementation of Payment Gateway and documentation
4	Aman Yadav	1st Week of April	Implementation of details page and documentation

Chapter 10

Conclusion:

Our project is only a humble venture to satisfy the needs of the user. The main aim of the project is to create a user-friendly software to provide plants to customers without having to leave their home. It facilitates the user to purchase plants according to his/her/their need time and availability. Several user-friendly techniques like cart and payment gateway are added. Plants varying from over six different categories are available. The plants can be selected and added to the cart and purchased all at once.

We made the tedious job of purchasing plants by visiting local nurseries easier by our software which connect the customer directly to the merchant. In our project we have overcome these problems and tried to create and lead to an errorless software. The software can be helpful for consumers as well as merchants. In future we are trying to add more features for the same.

References:

- Wesley J Chun," Core Python Applications Programming", Third Edition, Pearson Publication.
- E. Bal Guruswamy," Introduction to Computing and Problem Solving using Python", McGraw Hill Publication
- Learn to Master Python, from Star EDU solutions, by Script Demi's.
- https://www.geeksforgeeks.org/
- https://www.tutorialspoint.com/
- 3095 –Article Text- 5840-1-10-20210418, *"Turkish journal of computers and Mathematics Education, Vol.12 No.9 (2021), 411 -416".*
- IRJET-V7I4224, *"International Research Journal of Engineering and Technology (IRJET), Volume: 07 Issue: 04 | Apr 2020".*