**TRAINING SESSION DOCUMENTATION**

**VIVEK NARAYANAN**

**NSS COLLEGE OF ENGINEERING**

**1.THE BASICS OF GIT AND GITHUB**

On this session discussions were conducted on basics of git and GitHub were discussed

* Creation of GitHub account
* Creating a repository
* Creating pull request
* Cloning of repository
* Difference between cloning and forking
* Generation of pull request

Were also discussed and performed in vs code with git commands.

**Links:** [**https://github.com/Vivek11N/Git-and-Git-hub-Vivek-Narayanan.git**](https://github.com/Vivek11N/Git-and-Git-hub-Vivek-Narayanan.git)

[**https://github.com/Vivek11N/Hello-World-Vivek.git**](https://github.com/Vivek11N/Hello-World-Vivek.git)

**2.Database**

* Basics of E-R diagram
* Basics of postgery SQL
* Creation of tables insertion of data deletion table

**E-R diagram**: An Entity-Relationship Diagram (ER Diagram) visually represents the relationships between entities in a database. It uses rectangles to depict entities, ovals for attributes, and diamonds to show relationships, illustrating how data is organized and connected. ER Diagrams aid in designing and modelling databases by clearly showing entities, their attributes, and their interrelationships, facilitating better understanding and efficient data structuring.

Link: <https://github.com/Vivek11N/Database_task1.git>

Query for different purpose were described

**3.Agile Methodologies**

Agile methodologies are approaches to software development that prioritize flexibility, teamwork, and customer satisfaction. These methods involve iterative development, where small, functional parts of the product are delivered regularly, enabling quick adaptation to changes and ongoing enhancement. Popular frameworks such as Scrum and Kanban help manage workflow and boost team collaboration. Agile values delivering working software over extensive documentation, emphasizes customer collaboration over strict contracts, and prefers adaptability to rigid planning. The goal is to quickly produce high-quality products with continuous feedback to ensure they meet customer requirements.

* Core values of agile methodologies

1.Indivituals and interaction

2.working software

3.customer collaboration

4.reponding to change

* Principle of agile methodology e.g.: working software is the measure for progress
* Methods involved

1.waterfall

2.scrum

3.kanban

* Difference between scram and kanban

**4. Frontend development using HTML, CSS and JAVA SCRIPT**

* In this session creation webpage in vs studio was discussed and through example simple webpages were created which is stepwise demonstrated below
* Basics of frontend using language HTML, CSS and Js
* As part of HTML and CSS initially a simply page is created using the code given below
* Creation of simple webpage
* Creation of table
* Creation of login page using js
* CSS types: inline, internal, external

Links: <https://github.com/Vivek11N/HTML_TASK1.git>

Portfolio: <https://vivek11n.github.io/task/>

**5. React JS**

React.js is a widely-used JavaScript library created by Facebook for developing dynamic user interfaces, especially for single-page applications. It enables developers to build reusable UI components, handle application state effectively, and update the user interface quickly using a virtual Document Object Model.

Reacts declarative approach simplifies the design of complex UIs by allowing developers to specify how the UI should appear in various states. With its component-based architecture and extensive community support, React has become a prominent tool for crafting modern, interactive web applications.

1.Where it is used?

2.Setting up development environment.

Installation of Node.js, and npm

Initialization

Structure of React js

Basics concepts of React js

Concepts of hooks, event handling, use state

6. **Product life cycle**

* About product life: From concept of product to withdrawal from market
* Stage of life cycle: Development, Introduction, growth, maturity, decline
* Stages involved in DEVELOPMENT

1. Conceptualization of idea
2. Research
3. Design
4. Development
5. Testing

* The product is developed and introduced into market
* The consumers attracted and demand of product increases in market marks the growth of product
* Sales growth slow done and the price of product will be needed to get reduce due to entry of new competitors marks the Maturity level
* The products get declined in market due to several factors
* How to determine what stage your products are in?
* Uses of product life cycle.

1.competition:

2.pricing strategy

* Product creation process
* Factors affecting product life cycle

1.ease of entry

2.advancement in tech

3.rate of market acceptance

4.economic forces

**7.Business Analysis**

* It's utilized to pinpoint and express the necessity for organizational workflow changes, as well as to support and manage those changes effectively.
* Identifying customer needs and meeting them accordingly.
* What, why it is the problem solving power house