

Synopsis of Project

Project Title :- ECO Spark : Sustainable E-commerce for Eco-friendly Products

The objective of this project is to establish an innovative e-commerce platform, ECOSPARK, dedicated to promoting sustainable energy solutions through a diverse range of eco-friendly products. The increasing global emphasis on green energy and sustainability highlights the need for accessible and high-quality solar-powered and energy-efficient products.

EcoSpark specializes in products such as solar chargers, power banks, flashlights, garden lights, inverters, fans, and energy-efficient LED bulbs, all designed to reduce electricity consumption and dependence on fossil fuels. By integrating a user-friendly e-commerce platform, the project aims to provide a seamless and

engaging shopping experience optimized for all devices.

The proposed system will feature an intuitive UI/UX with three key pages. Product Listing Page (PLP) displays an organized grid or list of products with filters for categories, price range, ratings and sustainability benefits, allowing customers to browse efficiently. Product Detail Page (PDP) provides an interactive image gallery, product descriptions, technical specifications, related products, and customer reviews, enhancing decision making. E-commerce Cart System ensures a smooth checkout process with an engaging empty cart state, clear call-to-action buttons, and an intuitive Order Summary section.

Additionally, an admin dashboard will facilitate efficient inventory, order and customer management, ensuring seamless backend operations. The system

will be developed using HTML, CSS, JavaScript, Java, MySQL and Springboot to ensure a responsive, robust, and scalable interface.

The solution is expected to increase awareness and adoption of renewable energy, encourage consumers to make sustainable choices, and contribute to a greener future. By streamlining the shopping experience for eco-friendly products, EcoSpark will foster an organized, efficient, and environmentally conscious marketplace, significantly benefiting both consumers ~~and the~~.

Week -1

Date :- 13 Jan 2025

- Planning for the Project name, Project logo, Project features and colour theme
- Analysis of the requirements.

Date :- 14 Jan 2025

- Check all the setups are available or not, if not then we installed it and checked the versions of Java and other things that are required for Spring boot based Project.

Date :- 15 Jan 2025

- Spring Boot setup is done along with git and github setup.
- Also setup MySQL in the system with environment setup.

Date - 16 Jan 2025

- Design the landing page , Product Description Page and Product listing Page of the Project .

Date - 17 Jan 2025

- Decide the ecofriendly products we need to kept in our Project and also discuss about different type of categories , ~~we~~ under which we added Product .

Date - 18 Jan 2025

- Detailed study about Model , view and controller (MVC) .and also study about some basic idea and setup of Spring Boot Project .

- Create Project on SpringBoot framework.
Submitted
20-01-25

Week - 2

Date :- 20 Jan
2025

- Study about controller and also creating controller page for our Project.
- Also link controller page to html Page and return html file.

Date :- 21 Jan 2025

- Create repository on github and make it ~~private~~^{public} for everyone.

Date :- 22 Jan 2025

- Create customer home page and return that page in customer controller class.
- Create header , footer , main section of our Biospark Project .

Date : 23 Jan 2025

- Create CSS page for the respective html file ~~for~~ of home page of customer.
- linked CSS file with HTML file and done the customer home page on landing page based on the design of the project.

Date : 24 Jan 2025

- Create static folder ~~on~~ under ~~resource~~ ~~template~~ file of the project.
- kept all the style file, script file and image file under static folder.

Date : 25 Jan 2025

- kept all HTML file under template section and created Pages.

Summary
22.01.25

Week-3

Date : 27 / Jan / 2025

- Design EER (Enhanced Entity Relationship) diagram for our project.

Date : 28 / Jan / 2025

- Push the git project code to the github and learn how to do it.
- Learned about how to clone the git with your partner.

Date : 29 Jan 2025

- learned about git push and git pull and also learned how to commit the code.
- We learned about it and also implemented in our project.

Dt: 30 Jan 2025

- Learn about git and git branch.
- Learn about creating branch for making project.

Dt: 31 Jan 2025

- ^{Learn} Study steps for making branches in git and done pull and push in the Project.
- We studied it and implemented in our Project.

Dt: 1 Feb 2025

- Learn about Pull Request (PR) in github and implement it.
- Generate pull request and merge it with master branch.

Smruti
3.02.25

Week-4

Dt: 3 Feb 2025

- Create category class for categories in our ~~Eos~~ Eospark project.
- Also make what things we needed in category Page.
- Learn about Auditing class in Java.

Dt: 4 Feb 2025

- Discuss about Relationship in tables of Database.
- Create tables in Script.sql file for our Eospark Project.
- Built relationships between tables that are present in our Eospark Project.

Dt: 5 Feb 2025

- Work on MySQL workbench.
- Learn how to ~~study~~ run database on MySQL.

→ Create entity folder ~~in~~ under which Java entity class are written.

Dt → 06 Feb 2025

→ Study about collection framework, list in Java.

→ Understand about git and github.

Dt ÷ 07 Feb 2025

→ Study about fragment ~~using~~ in Java to separate common file.

Dt ÷ 08 Feb 2025

→ Decide what ^{no. of} pages, we have to done for our Ecospark project.

→ Made design for it.

~~Sprints~~
08-02-25

Week -5

Dt :- 10 Feb 2025

- Briefly discuss about CI/CD pipeline, Also learn ORM (Object Relational Mapping).
- By studying ORM, we learn the relationship between tables in database on MySQL.

Dt :- 11 Feb 2025

- Study about JPA hibernate , Java Persistent API .
- Insert data in data.sql file of database of our project .

Dt :- 12 Feb 2025

- Create enum classes under constant folder inside the main program .
- Create repository of category class and extends JPA repository .
- Added annotation to the following controllers .

Dt: 13 feb 2025

- Data binding was done like Data from backend to frontend has been done to represent the product or category ^{from} in the database.
- Data binding was done through creating loop in the respected controllers.

Dt: 14 feb 2025

- Creating Product listing page (PLP) and bind data from backend in PLP page and showcasing the data to front-end.
- Also added CSS for it.

Dt: 15 Feb 2025

- Learn about assigning ticket in Github.
- And also knew about how to create new branch according to it.

Swaraj
170225

Week-6

Dt: 17 Feb 2025

- We learned about linking categories to go to PLP page by doing data binding from category page to product listing page.
- Learn code for data binding and write it inside the product controller.

Dt: 18 Feb 2025

- Study about beekeeper studios, where we export or import data from database of one system to another system.

Dt: 19 Feb 2025

- Added fragment and make separate files for each section.
- Learn how to write or link fragment in code.

DT :- 20 Feb 2025

- User registration and sign-in page completed and working on PDP and cart page.

: DT :- 21 Feb 2025

- Working on cart page and admin page of Project.
- Insert products to the categories.

DT :- 22 Feb 2025

- Completed sign-up page and working on cart page and admin page.
- Learn about search working of search button of home / product page.

Saurabh
24.02.25

Week - 7

Dt : 24 Feb 2025

- Working on category page of admin dashboard.
- Also completed dashboard page of admin dashboard Page.
- Learn about Getmapping and Postmapping.

Dt : 25 Feb 2025

- Learn about Image uploading and steps for doing image uploading in the Project.
- Working on Product page of admin dashboard.

Dt : 26 Feb 2025

- Working on image uploading and also done the work on search button.

DT-: 27 Feb 2025

- Working on Cart page and product page of admin dashboard.
- Learn about image uploading briefly.

DT-: 28 Feb 2025

- Completed cart page and working on product page of admin dashboard.
- Learn about Access Specifiers, Methods, variables in Java.

DT-: 01 March 2025

- Working on edit and delete page of category page of admin dashboard.

Saurabh
3.03.25

Week-8

Dt:- 03 March 2025

- Learn about keywords, literals, unescape classes in Java.
- Working on Product page of admin dashboard, added CSS and Javascript file with it.

Dt:- 04 March 2025

- Completed search button of customer page.
- Learn about class and object, also studied References in Java.

Dt:- 05 March 2025

- Learn about Spring security in Springboot.
- Fixing errors of search button of home page.

Dt: 06 March 2025

- Working on image uploading on the project by using controller, html file.
- Learn about pass by value. and Pass by reference in Java.

Dt: 07 March 2025

- Learn about Inheritance in Java and also studied OOPS concept in Java.
- Learned Spring Security.

Dt: 08 March 2025

- Briefly discuss about constructor. and types of constructor.
- Working on search button and fixing issues.

~~Done~~
10.03.25

Week -9

Dt:- 10 March
2025

- Working on payment page and about page.
- Learn more about Spring security and accessore method in Java.

Dt:- 11 March 2025

- Working on contact us page and solving issues of data binding on search button.
- Study about functional interface of spring security.

Dt:- 12 March 2025

- working on image uploading of product page of admin dashboard.
- Solving issues of category page of admin dashboard about adding product.

Dt :- 13 March 2025

- Updated the data of admin dashboard in category Page.
- Created the order and customer Page of admin dashboard.

Dt :- 14 March 2025

- Learn about data binding the order Page of our ~~E-commerce~~ Project.
- Completed the image uploading of both category and product page.

Dt :- 15 March 2025

- Working on Order history and place-order Page.

Saurav
16.03.25

Week-10

Dt:- 17 March 2025

- Focusing CSS for Customer home page and modal of admin dashboard.

Dt:- 18 March 2025

- Learn about edit page of ~~cat~~ Product in admin dashboard and implement it on our Ecospark Project.

Dt:- 19 March 2025

- Image uploading was completed ~~on~~ of category and product in ~~and~~ customer home page.
- Widget page was created, also done the style.

Dt :- 20 March 2025

- Created modal for widget page where csv file was created.
- Data coming from backend to frontend was done by fixing issues.

Dt :- 21 March 2025

- Completed the edit and remove of product and category page of admin dashboard.
- Clicking on Order page of admin dashboard and also the data binding was done of orders from cart page to checkout page was done.

Summary
22-03-25