**Third Year Project Work -II Details**

**2020 Course**

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| Group Number | : | 38 |
| Project Title | : | COASTAL SAFETY AND TOURISM SUITABILITY APP |
| Project Area | : | Full Stack App with API |
| Internal Guide | : | Dr.Priya Shelke |
| Sponsoring industry | : | N/A |
| Group Members |  | |  |  |  |  | | --- | --- | --- | --- | | Roll No. | Gr. No. | Name | Sign | | 333001 | 22210460 | Sanskruti Avhale |  | | 333034 | 22210833 | Ashish Mundkar |  | | 333038 | 22210284 | Sakshi Nagmode |  | | 333055 | 22210780 | Shrey Ingole |  | |

Internal Guide Name and Signature

**Weekly Planning Sheet**

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**Academic Year: 2023-24 Sem:5**

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| **Week No.** | **Activity Planned** | **Activity Completion Status** | **Student Signature** | **Guide**  **Signature** |
| **Week 1** | Project topic selection and finalization; problem statement drafting | Complete |  |  |
| **Week 2** | Literature review on existing beach  safety systems and real-time public  safety apps   |  | | --- | |  | | Complete |  |
| **Week 3** | |  | | --- | | Requirements gathering  (functional and non-functional)  and initial system architecture design |  |  | | --- | |  | | Complete |  |
| **Week 4** | |  | | --- | |  |  |  | | --- | | Finalizing tech stack (Flutter,  FastAPI, PostgreSQL,  APScheduler) and setup  of development environment | | Complete |  |
| **Week 5** | Backend development: API structure design and initial FastAPI setup | Complete |  |  |
| **Week 6** | |  | | --- | | Database design: PostgreSQL  schema creation and integration  with backend |  |  | | --- | |  | | Complete |  |
| **Week 7** | |  | | --- | | Frontend development:  Flutter project setup and  initial UI wireframes |  |  | | --- | |  | | Complete |  |
| **Week 8** | |  | | --- | | Real-time data integration:  connecting weather and marine APIs |  |  | | --- | |  | | Complete |  |
| **Week 9** | |  | | --- | |  |   Implementation of geolocation  features and notification system | Complete |  |  |
| **Week 10** | Offline support integration and  backend scheduling tasks with  APScheduler | Complete |  |
| **Week 11** | |  | | --- | | User testing phase 1:  Collecting feedback, bug fixes,  and performance optimization |  |  | | --- | |  | | Complete |  |
| **Week 12** | Final integration, end-to-end testing, documentation, and report writing | Complete |  |

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**Project Log Book for Actual work done**

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| **Week No.** | Date of Meeting | **Activity** | | **Plan for the**  **next week** | **Remarks by the Guide** | **Sign of students** | **Guide Signature** |
| 1 | 16/1/25 | | Finalized project topic and problem statement. | Start literature review on existing beach safety and real-time apps. |  |  |  |
| 2 | 23/1/25 | | Conducted literature review and summarized key findings. | Gather functional and non-functional requirements. |  |  |
| 3 | 30/1/25 | | Collected requirements; drafted initial system architecture. | Finalize tech stack and set up development environment. |  |  |
| 4 | 6/2/25 | | Chose Flutter, FastAPI, PostgreSQL; environment setup complete. | Start backend development: FastAPI setup and basic routes. |  |  |
| 5 | 12/2/25 | | Designed API structure; set up initial FastAPI backend. | Design database schema and integrate with backend. |  |  |  |
| 6 | 20/2/25 | | Created PostgreSQL database; connected backend with database. | Start frontend development: Flutter project setup and basic UI screens. |  |  |
| 7 | 27/2/25 | | Developed basic frontend structure and wireframes in Flutter. | Integrate real-time APIs (weather, marine data) with backend. |  |  |
| 8 | 6/3/25 | | Integrated real-time weather and marine data APIs. | Implement geolocation and location-based notifications. |  |  |
| 9 | 13/3/25 | | Added geolocation tracking and push notification features. | Implement offline support and background scheduling using APScheduler. |  |  |  |
| 10 | 27/3/25 | | Offline support completed; APScheduler tasks configured. | Conduct first round of user testing and collect feedback. |  |  |
| 11 | 10/4/25 | | User testing phase 1 completed; identified and fixed bugs. | Finalize application, perform system integration and performance optimization. |  |  |
| 12 | 17/4/25 | | Final integration, system testing, and report preparation. | Project submission and presentation preparation. |  |  |

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