Mini Project Logbook

ExerLytix: Smart Gym & AI Trainer

Group Members

Roll No:15 Name: Khushal Dhumane

Roll No:22 Name: Imtiyaz Ahamad

Roll No:56 Name: Rahul Suwasiya

Supervisor/Guide:

Professor Indira Bhattacharya



### Department of Master of Computer Applications

Vivekanand Education Society’s Institute of Technology

**(An Autonomous Institute Affiliated to University of Mumbai, Approved by AICTE & Recognized by Govt. of Maharashtra)**

Academic Year: 2024-2025

# INSTITUTE VISION & MISSION

#### VISION**:**

To create a vibrant knowledge-oriented environment with innovative teaching practices and to inculcate tradition of socially conscious application of technology.

#### MISSION:

* To inculcate culture of value-based education.
* To enthuse students to develop in an ambient environment of caring and of sharing information.
* To enable students to work towards excellence in their chosen fields with professional bent of mind.

# Master of Computer Applications Department

#### VISION:

Towards leading the way in the area of Computer Application, to train and nurture the students to become successful Technocrats thus benefitting the Society and Nation.

#### MISSION**:**

* To provide opportunities to students so that they understand the Theoretical Principles and apply them.
* To enable the students to continually master the evolving Tools, Techniques, and Trends in Technology and Management and effectively put them in practice in a cost-effective manner**.**

# Master of Computer Applications

**2024-2025**

**Group No**: 24B09

**Project Title**: ExerLytix ( Smart Gym & AI Trainer )

**Guide**: Indra Bhattacharya

**Students Details**:

|  |  |  |  |
| --- | --- | --- | --- |
|  | Member-1 | Member-2 | Member-3 |
| Roll No | 15 | 22 | 56 |
| Name | Khushal Dhumane | Imtiyaz Ahamad | Rahul Suwasiya |
| Class | FYMCA | FYMCA | FYMCA |
| Contact | 9158199907 | 7039165313 | 8591342520 |
| Email | 2024.khushal.dhumane@ves.ac.in | 2024.imtiyaz.ahamad@ves.ac.in | 2024.rahul.suwasiya@ves.ac.in |
| Signature |  |  |  |

# DECLARATION

I declare that this project represents my ideas in my own words without plagiarism and wherever others' ideas or words have been included, I have adequately cited and referenced the original sources. I also declare that I have adhered to all principles of academic honesty and integrity and have not misrepresented or fabricated or falsified any idea/data/fact/source in my project work. I promise to maintain minimum 75% attendance, as per the University of Mumbai norms. I understand that any violation of the above will be cause for disciplinary action by the Institute.

Yours Faithfully

1. Khushal Dhumane
2. Imtiyaz Ahamad
3. Rahul Suwasiya

**(Date & Signature of Student)**

## 

##### Course Objectives:

1. Conceptualize knowledge with emphasis on team work, effective communication, critical thinking and problem solving skills.
2. Adapt to a rapidly changing environment by having learned and applied new skills and new technologies.
3. Acquaint with the process of applying basic computer applications and provide solutions to the problems in various application domains.

##### Course Outcome:

1. Demonstrate the ability to produce a technical document.
2. Apply software project management skills during project work.
3. Build small groups to work effectively in team on medium scale computing projects.
4. Design and evaluate solutions for comxcv plex problems.

## Proposed Schedule for Mini Project

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Week/ Date** | **Content** | **Time**  **Required** | **Remark** | **Signature** |
| 11/10/24 | It is decided that each group member will  prepare a few problem statements, which will then be presented to the mentor. | 7 days |  |  |
| 17/10/24 | One problem statement will get approved by our mentor | 1 day |  |  |
| 18/10/24 | After the topic has been approved by our mentor, it has been decided that a group meeting will be conducted to discuss the topic in detail. During the discussion, the exact goals  and target users of the project will be clearly defined. | 6 days |  |  |
| 24/10/24 | It has been decided that the focus will be placed on the key features of the topic.  It has also been decided that the wireframe and  Software Requirements Specification (SRS) will be worked upon. | 6 days |  |  |
| 1/11/24 | Wireframe, SRS, PPTs, Synopsis will be worked upon. | 14 days |  |  |
| 15/11/24 | We’ll meet our mentor for Second Review. | 1 day |  |  |
| 22/11/24 | 3rd and final review documentation will be worked upon. | 7 days |  |  |
| 29/11/24 | Coding & Development phase initiated | 15 days |  |  |

**2024-2025**

## Mini-Project Progress Report

### Sem – 1

**Project Gr No:**  24B09

**Title**: ExerLytix (Smart Gym & AI Trainer)

**Guide**: Indra Bhattacharya

|  |  |
| --- | --- |
| **Roll No** | **Name of Project Member** |
| 15 | Khushal Dhumane |
| 22 | Imtiyaz Ahamad |
| 56 | Rahul Suwasiya |

|  |  |  |  |
| --- | --- | --- | --- |
| **Week/Date** | **Work Done** | **Students Present** | **Sign of Guide** |
| Week 1 | A few topics were presented to the project mentor.  Detailed explanations of the topics were provided. | Khushal Dhumane |  |
| Imtiyaz Ahamad |
| Rahul Suwasiya |
| The mentor advised further consideration of ideas. | Khushal Dhumane |  |
| Imtiyaz Ahamad |
| Rahul Suwasiya |
| Week 2 | A brainstorming session was conducted on several topics.  A topic were selected for mentor approval. | Khushal Dhumane |  |
| Imtiyaz Ahamad |
| Rahul Suwasiya |
| ExerLytix (Smart Gym & AI Trainer) Fitness & Wellness Website project idea was approved | Khushal Dhumane |  |
| Imtiyaz Ahamad |
| Rahul Suwasiya |
| Week 3 | A brief group meeting was held to discuss the project topic in detail, as advised by the mentor.  The discussion focused on clearly defining the exact goal and scope of the project  Synopsis was made ready | Khushal Dhumane |  |
| Imtiyaz Ahamad |
| Rahul Suwasiya |
| Goals were mapped clearly | Khushal Dhumane |  |
| Imtiyaz Ahamad |
| Rahul Suwasiya |

|  |  |  |  |
| --- | --- | --- | --- |
| **Week/Date** | **Work Done** | **Students Present** | **Sign of Guide** |
| Week 4 | The wireframe for the project was finalized, and work on its development began. | Khushal Dhumane |  |
| Imtiyaz Ahamad |
| Rahul Suwasiya |
| The Software Requirements Specification (SRS) for the project was also determined and preparation started. | Khushal Dhumane |  |
| Imtiyaz Ahamad |
| Rahul Suwasiya |
| Week 5 | Documentation for the second review was prepared, which included the problem statement, project objectives, SRS and the wireframe. | Khushal Dhumane |  |
| Imtiyaz Ahamad |
| Rahul Suwasiya |
| During the second review, the problem statement, wireframe, and SRS were presented | Khushal Dhumane |  |
| Imtiyaz Ahamad |
| Rahul Suwasiya |
| Week 6 | Work on the third and final review of the project was initiated. | Khushal Dhumane |  |
| Imtiyaz Ahamad |
| Rahul Suwasiya |
| All the materials provided by our mentor were thoroughly reviewed during the group meeting. The primary focus was placed on the PowerPoint presentation. | Khushal Dhumane |  |
| Imtiyaz Ahamad |
| Rahul Suwasiya |
| Week 7 | The design and development of the user interface were discussed. This includes the layout, visual elements, and user interactions. | Khushal Dhumane |  |
| Imtiyaz Ahamad |
| Rahul Suwasiya |
| The wireframe for the project was finalized, and work on its development began. | Khushal Dhumane |  |
| Imtiyaz Ahamad |
| Rahul Suwasiya |
| Week 8 | The Software Requirements Specification (SRS) for the project was also determined and preparation started. | Khushal Dhumane |  |
| Imtiyaz Ahamad |
| Rahul Suwasiya |
| The actual coding and execution of the project and modules working were discussed | Khushal Dhumane |  |
| Imtiyaz Ahamad |
| Rahul Suwasiya |

**2024-2025**

**Proposed Schedule for Mini Project**

**SEM-2**

**Title**: ExerLytix (Smart Gym & AI Trainer)  **Project Gr No:**  24B09

**Guide**: Indra Bhattacharya

|  |  |
| --- | --- |
| **Roll No** | **Name of Project Member** |
| 15 | Khushal Dhumane |
| 22 | Imtiyaz Ahamad |
| 56 | Rahul Suwasiya |

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Week/Date** | **Work Done** | **Time(Hours)** | **Students Present** | **Sign of Guide** |
| Week 1 | Creation of UI Screens. | 10 | Khushal Dhumane |  |
| Imtiyaz Ahamad |
| Rahul Suwasiya |
| Week 2 | Implement AI Trainer Feature. | 12 | Khushal Dhumane |  |
| Imtiyaz Ahamad |
| Rahul Suwasiya |
| Week 3 | Integrate API of AI trainer. | 15 | Khushal Dhumane |  |
| Imtiyaz Ahamad |
| Rahul Suwasiya |
| Week 4 | Filtering API Response. | 12 | Khushal Dhumane |  |
| Imtiyaz Ahamad |
| Rahul Suwasiya |
| Week 5 | Creating Authentication Module. | 15 | Khushal Dhumane |  |
| Imtiyaz Ahamad |
| Rahul Suwasiya |
| Week 6 | Adding User Module. | 14 | Khushal Dhumane |  |
| Imtiyaz Ahamad |
| Rahul Suwasiya |
| Week 7 | Added Dashboard | 16 | Khushal Dhumane |  |
| Imtiyaz Ahamad |
| Rahul Suwasiya |
| Week 8 | Error Resolution | 18 | Khushal Dhumane |  |
| Imtiyaz Ahamad |
| Rahul Suwasiya |
| Week 9 | Improved Profile Validation and Dashboard | 14 | Khushal Dhumane |  |
| Imtiyaz Ahamad |
| Rahul Suwasiya |
| Week 10 | SEM 2 Final Review | 2 | Khushal Dhumane |  |
| Imtiyaz Ahamad |
| Rahul Suwasiya |

## Mini Project Progress Report

## SEM-2

|  |  |  |  |
| --- | --- | --- | --- |
| **Week/Date** | **Work Done** | **Students Present** | **Sign of Guide** |
| Week 1 | Started the development of the project on Visual Studio. | Khushal Dhumane |  |
| Imtiyaz Ahamad |
| Rahul Suwasiya |
| Created different module for different activity. | Khushal Dhumane |  |
| Imtiyaz Ahamad |
| Rahul Suwasiya |
| Week 2 | Created the Working AI Trainer feature. | Khushal Dhumane |  |
| Imtiyaz Ahamad |
| Rahul Suwasiya |
| AI Trainer is working and Detecting Human Gestures. | Khushal Dhumane |  |
| Imtiyaz Ahamad |
| Rahul Suwasiya |
| Week 3 | Met Indira mam and showed working of the project. | Khushal Dhumane |  |
| Imtiyaz Ahamad |
| Rahul Suwasiya |
| Started Counting workout and displaying no of rep. | Khushal Dhumane |  |
| Imtiyaz Ahamad |
| Rahul Suwasiya |
| Week 4 | Review-1: Met Indira mam and showed working of AI Trainer Feature | Khushal Dhumane |  |
| Imtiyaz Ahamad |
| Rahul Suwasiya |
| Improve AI Trainer Feature which showing more accurate data. | Khushal Dhumane |  |
| Imtiyaz Ahamad |
| Rahul Suwasiya |
| Week 5 | Started improving API Response. | Khushal Dhumane |  |
| Imtiyaz Ahamad |
| Rahul Suwasiya |
| Improved UI Profile Screen. | Khushal Dhumane |  |
| Imtiyaz Ahamad |
| Rahul Suwasiya |

|  |  |  |  |
| --- | --- | --- | --- |
| **Week/Date** | **Work Done** | **Students Present** | **Sign of Guide** |
| Week 6 | Started working onto the login and register screen. | Khushal Dhumane |  |
| Imtiyaz Ahamad |
| Rahul Suwasiya |
| Week 7 | Completed UI implementation and added validation. | Khushal Dhumane |  |
| Imtiyaz Ahamad |
| Rahul Suwasiya |
| Week 8 | Added Additives information and  insufficient information polished. | Khushal Dhumane |  |
| Imtiyaz Ahamad |
| Rahul Suwasiya |
| Allergen Response. | Khushal Dhumane |  |
| Imtiyaz Ahamad |
| Rahul Suwasiya |
| Week 9 | Added Dashboard to show the progress of workout. | Khushal Dhumane |  |
| Imtiyaz Ahamad |
| Rahul Suwasiya |
| Improved Layout to manage multiple responses. | Khushal Dhumane |  |
| Imtiyaz Ahamad |
| Rahul Suwasiya |
| Week 10 | Review 2 : Met Ramesh Sir and showed the Progress of Project. | Khushal Dhumane |  |
| Imtiyaz Ahamad |
| Rahul Suwasiya |