**Final Year Project (FYP) Defense Proposal Form**

**University/Institute Detail:**

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| Name of University/Institution | Institute of Space Technology | | Physical Address: | Islamabad Expressway Sector H DHA Phase 2 |
| Telephone & Fax No: | 051-9075100 | | Department Name: | Electrical Department |
| City: | Islamabad | | Province: | Punjab |
| **Nominated Project Details:-** | |
| Project Supervisor & Co-Supervisor Name and Designation: | Tayyaba Arshad  Lecturer Tufail Sajjad  Lecturer | | Contact Details: | Email: [atayyaba122@gmail.com](mailto:atayyaba122@gmail.com)  Cell No 03368836375  Off No: 5853 |
| Project Supervisor Qualification: | MS (Data Science) | | No of Publications of Supervisors: | 6 |
| Students Name(s): | 1.\_Syeda Farwa Rizvi  2.\_Mujtaba Abbas | | Students Mobile No: | 1.\_\_03355964684\_\_\_\_  2.\_\_03340991483\_\_\_\_ |
| Students CGPA | 1.\_\_\_3.23\_\_  2.\_\_\_2.99\_\_\_\_ | | Students Email: | 1. [Farwarizvi414@gmail.com](mailto:Farwarizvi414@gmail.com)   [2. mujtabazaidi245@gmail.com](mailto:2.hassanabdulah111468@gmail.com) |
| Degree Program/ Title: | BS CS | | Area of Specialization: | App Development, ML/DL |

**Final Year Project Details:**

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| 1. **Project Title:** | | | HealVision | | |
| 1. **Project Start Date:** | | | **08th August, 2022** | | |
| 1. **Project Finish Date:** | | | **15th June,2023 (tentative)** | | |
| 1. **Project Summary (less than 200 words)** | | |  | | |
| Substance Use Disorder (SUD) present a serious risk to not merely individuals but also organizations, as excessive consumption leads to decreased productivity, health issues, injuries, mental health concerns, unemployment risk, and death. These disorders fall under Sustainable Development Goal 3 - Good Health and Well-Being, Goal 10 – Reduced Inequalities, and Goal 16 – Peace, Justice, and Strong Institutions. Substance Use Disorder encompasses various substances, such as substance dependence, drug addiction, and alcoholism. To combat SUD therapy, medication, treatment plans, support groups, and lifestyle modifications can be applied through HealVision. Introducing solutions with the use of aspect-based analysis of textual data for emotion detection to aid the therapist in achieving meaningful results. The application not only supports those with addiction problems but also for their loved ones, providing a platform for mutual support and encouragement. | | | | | |
| 1. **Project Objectives:** | | |  | | |
| * To develop a Mobile Application for addiction recovery. * To provide a platform for addicts to monitor their progress, manage therapy appointments, and access support. * To aid communication between users (therapists, addicts, and support groups). * To incorporate features such as addiction level determination, appointment notifications, aspect-based analysis emotion detection. * Implement a Patient Dashboard with features such as addiction level determination [quiz based to determine intensity], appointment booking [appointment scheduler and receive notifications], and aspect-based analysis [analyze user feedback, messages, to assess emotional states and provide personalized support]. * Implement a Therapist Dashboard to allow communication, progress tracking, health tracker, and appointment management. * Implement emotion detection to give the therapist a report after a chat session. | | | | | |
| 1. **Project Implementation Method** | | |  | | |
| We are developing this mobile application on Flutter Framework and Dart will be our frontend and backend programming language. Firebase is our Realtime Database. IDE is Android Studio and Visual Studio depending upon the environment and requirements. | | | | | |
| 1. **Key Milestones of the Project with Dates** | | |  | | |
| **S.No.** | **Elapsed time since start of the project** | | **Milestone** | | **Deliverable** |
| 1. | September 26th - October 14th | | 1 | | Requirements Engineering |
| 2. | 15th October - 13th November | | 2 | | Survey of healthcare professionals |
| 3. | 14th November - 5th December | | 3 | | Designing UI of the application |
| 4. | 6th December - end of Semester 7 | | 4 | | Analyzing and researching various datasets as well as models of aspect-based Analysis for emotion detection |
| 5. | Start of Semester 8 - 14st April | | 5 | | Deployment of UI on the development tool and training model |
| 6. | 15th April - 13th May | | 6 | | Deploying Model and deploying backend |
| 7. | 14th May - end of Semester 8 | | 7 | | Full Complete Integration and Testing |
| 1. **Final Deliverable of the Project:** | | | (Please tick one of the following) | | |
| Hardware System | | **Software System** | | HW/SW integrated system | |
| Software Simulation results | | Comparative Study | | Theoretical Design/Architecture | |
| Simulator Design | | Other Please specify | |  | |
| 1. **Please Specify Technical Details of Final Deliverable** | | |  | | |
| * Programming language: Dart * Framework: Flutter * Design: Attractive & User Friendly Interface * Registration and login: Secure system for user authentication * Patient dashboard: Personalized features for progress tracking, support, and education * Therapist dashboard: Tools for managing patients, appointments, and providing feedback * Appointment system: Efficient scheduling and management of virtual or in-person sessions * Emotion detection chat: AI-powered analysis of text-based communication for emotional cues * Offline capabilities: Essential features accessible without internet connection * Integrations: Seamless integration with video conferencing and other relevant platforms * Data model: Well-defined schema for storing user data, appointments, chat transcripts, and relevant information | | | | | |
| 1. **Equipment required for making prototype/working model:** | | | (Please indicate in tabular form the required equipment’s along with estimated cost) | | |
| N/A | | | | | |
| 1. **Benefits of the Project** | | | (Please specify Direct/Indirect beneficiaries) | | |
| The Heal Vision initiative aims to develop, deploy, and continuously improve an application dedicated to managing Substance Use Disorder (SUD). Its key goal is to establish a robust support system for those grappling with addiction and their therapists. This application will provide a diverse set of features and tools to assist users in comprehending their addiction, controlling its severity, and supporting their path to recovery.  The Heal Vision initiative strives to play a part in the worldwide endeavors to combat addiction. It seeks to provide an affordable, easily accessible, and cutting-edge resolution for both individuals contending with addiction and the professionals aiding them on their path to recovery. | | | | | |

It is certified that the FYP titled “**HealVision**” has been approved and is being undertaken by the above mentioned students as their Final Year Project.

It is undertaken that the undersigned have understood the “terms & conditions” of the program, and further reiterate that, if the subject FYP is approved for funding, the disbursed funds shall be utilized as per “terms & conditions” and the undersigned will be liable to reimburse/refund the unutilized amount and other cost not approved by the IST , if any.

It is further undertaken that after utilization of funds, the said “Fund Utilization Report” shall be furnished along with the other required deliverables as and when required by the IST.

Tayyaba Arshad

Lecturer ,

Signature of Supervisor:\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

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| Dr. Khurram Khurshid    Signatures of HoD: |  |