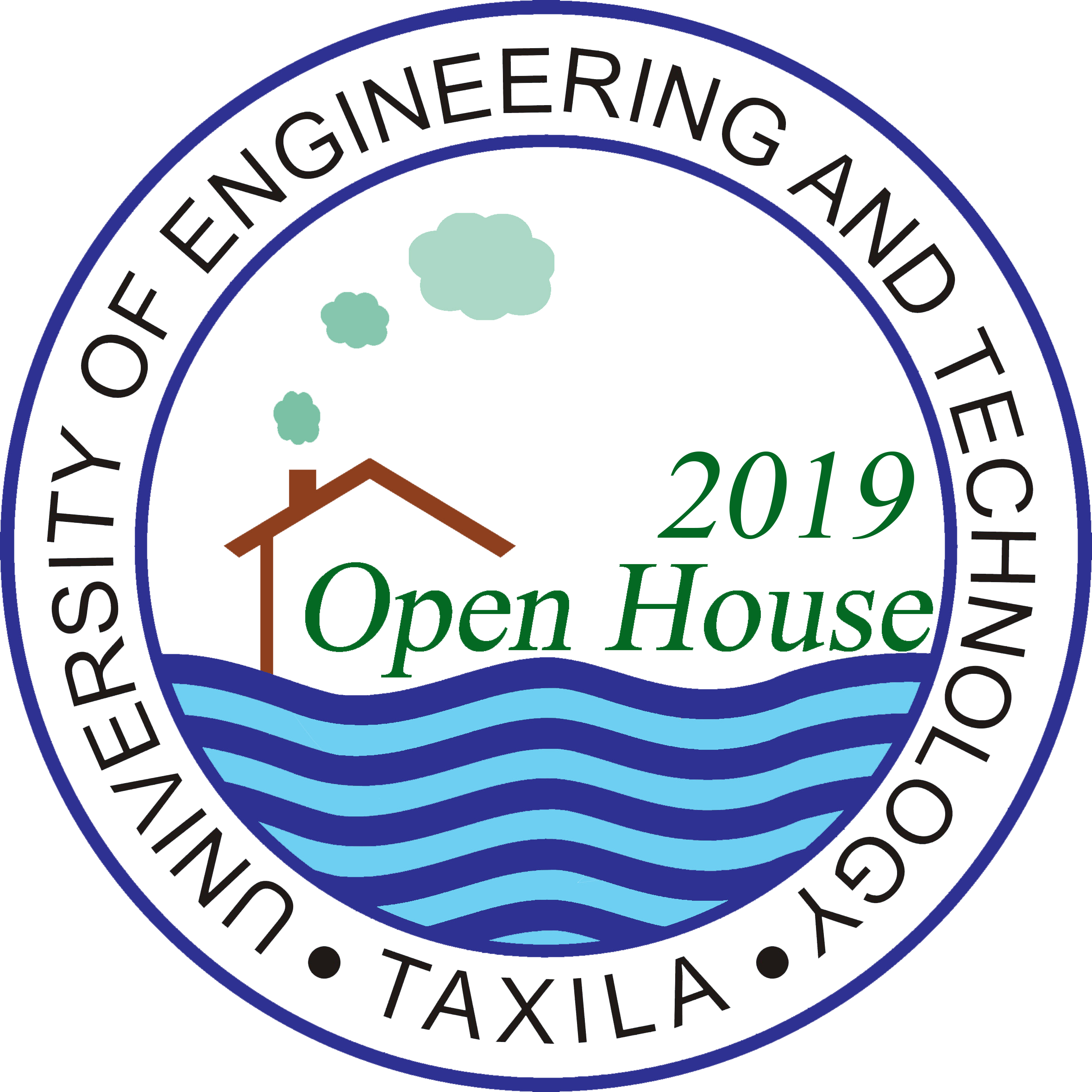
OPEN HOUSE

FINAL YEAR PROJECT EXIBITION 2019



16th JULY 2019

FACULTY OF TELECOMMUNICATION ENGINEERING

ABSTRACTS

SOFTWARE ENGINEERING DEPARTMENT

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# SOFTWARE ENGINEERING DEPARTMENT

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| --- | --- |
| **Project Title:** | **GymFit-Workout Scheduling and Fitness Guidance Application** |
| **Students:** | Ammarah Waheed (15-SE-01)  Maheen Mazhar (15-SE-07)  Fatimah Zahid (15-SE-23) |
| **Supervisor:** | Dr. Ali Javed  Assistant Professor |
| **Email:** | ali.javed@uettaxila.edu.pk |
| **Abstract:** | GymFit provides ease to the people who want to take full control of their body. People want to keep themselves physically fit but can’t stick to their routines due to many obstacles as it is difficult to keep record of their daily workouts manually. Also, for beginners it is difficult to take a start as they don’t have knowledge of the workouts. To cope up with such problems we need an automated gym trainer, GymFit. It is an android application that contains different categories of workout and their descriptions from which the user can select any of the workout and can also add customized exercises. Online video tutorials are also provided to guide the beginners. The schedule of every user is maintained, and every user’s activity is recorded and stored in the database for further use. This will help to keep the users accountable and up-to-dated about their progress. |

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| **Project Title:** | **Complaints Cataloguing And Rectification system** |
| **Students:** | Arooba Arooj (15-SE-02)  Ezza Shaheen (15-SE-24)  Hira Kishwar (15-SE-28) |
| **Supervisor:** | Dr. Huma Ayub,  Assistant Professor |
| **Email:** | huma.ayub@uettaxila.edu.pk |
| **Abstract:** | This system is a web-based system which is aimed at compiling the complaints and queries of the students of our software department, rectifying them and presenting the students with the most desired outcome related to particular complaint or query. By using this system, the student will register his/her complaint by specifying all required details. The particular complaint will be tracked by the admin. After recognizing the cruciality of the registered complaint, the admin will forward this complaint to the teacher who is responsible for the further processing. This system will not only resolve the registered complaints of students but it will also enable students to view their complaint history, check feedback, set reminders and view notifications. Moreover, it will provide them with the online forms related to DSC issues, registration issues and application documents. |

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| **Project Title:** | **Database Comparison Utility Solution** |
| **Students:** | Hania Arif (15-SE-03)  Tarim Dar (15-SE-53)  Hafsa Ilyas (15-SE-55) |
| **Supervisor:** | Dr. Ali Javed,  Assistant Professor |
| **Email:** | [ali.javed@uettaxila.edu.pk](mailto:ali.javed@uettaxila.edu.pk) |
| **Abstract:** | **Database Comparison Utility Solution (DCUS)** is an industry-based project, being initially developed for Bentley Systems International. The main goal of this project is to develop such a user-friendly utility solution that might help the companies, mainly performing off-shore structural analysis, to perform large SQLite database comparisons without getting any false positive alarms or errors. In order to achieve this level of accuracy and efficiency we tend to use a new feature called as ‘tolerance factor’ along with multiple other - large database optimization, performance and efficiency increasing - techniques. With the help of the (newly introduced) tolerance factor we try to cope up with the real-world post-implementation design value changes in the database which might be acceptable up to a specific range according to the off-shore structural solution designers and developers. Hence, the tolerance factor will help to decrease or approximately remove the false positive failure reports being generated during database comparison, therefore increasing the efficiency of the system. In this way DCUS might not only prevent the damage or loss of the infrastructure but that of lives as well by helping in correct difference detection during offshore structural analysis and complex model analysis processes. |

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| **Project Title:** | **A smart system for online vehicle parking management** |
| **Students:** | Anum Razzaq (15-SE-04)  Rabia Nawaz (15-SE-90)  Hania Ilyas (15-SE-68) |
| **Supervisor:** | Engr. Dr. Syed Mohammad Anwar  Associate Professor |
| **Email:** | [s.anwar@uettaxila.edu.pk](mailto:s.anwar@uettaxila.edu.pk) |
| **Abstract:** | Smart system for online vehicle parking management system is basically a system designed to avoid problems of parking. As we go for shopping, in clubs, parks or anywhere, on daily basis we face difficulties of parking because of increase in vehicles and traffic day by day. Our system is basically consisting of both software and hardware. App is designed for users to book parking lots online of place where they want to go. Hardware will be installed in specific parking areas where the system is present. Hardware contains sensor which sense the presence and absence of vehicle and send data to app about vehicle. App is basically used by users to book different parking lots and for checking availability of parking. User checks availability of lots. He/she books his/her lot and when reaches in parking area and parks in specific area the data through sensors is recorded. |

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| **Project Title:** | **Decentralized data storage network** |
| **Students:** | Fahad Khan (15-SE-05)  Hassan Saleem (15-SE-49)  Kamran Subhani (15-SE-71)  Muhammad Ismail (15-SE-95) |
| **Supervisor:** | Dr. Huma Ayub,  Assistant Professor |
| **Email:** | huma.ayub@uettaxila.edu.pk |
| **Abstract:** | This project aims at comparison of the old technologies and the latest technologies emerging in the market and have knowledge and implementation experience on them. And to provide a solution to the problem that is Decentralized data storage network (Decdsne). The developed application will provide a platform to the people by which they can rent their laptop or computer spaces and other peoples or companies used these spaces on rent by buying the token. The system is totally decentralized and data are stored in encrypted form. The Application is developed using Block Chain and Cryptography that can be easily modified it if required in the future. Block Chain is used to store the data on more than one pc therefor data is more secured and safe. |

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| **Project Title:** | **Smart Enterprise solution for business management** |
| **Students:** | Hamza Raees (15-SE-88)  Jehanzaib Arshad (15-SE-82) |
| **Supervisor:** | Dr. Huma Ayub  Assistant Professor |
| **Email:** | huma.ayub@uettaila.edu.pk |
| **Abstract:** | The basic purpose of Application named as small enterprises solution is to help business community to manage their record effectively. And retrieve the record when ever needed our basic stake holders are superstore owners and manager. The system will provide them facility to have functionality of POP POS and Inventory management under same platform. It will reduce human effort. The system shall be able to make daily weekly and monthly sales report. It has some special features like market basket analysis for observing customers buying behavior. More over the system is designed in a way that users can easily interact with it. |

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| **Project Title:** | **Smart Shoe: An Object Detection Framework Using Wearable Sensors** |
| **Students:** | Leena Aizdi (15-SE-06)  Iqra Toheed (15-SE-16)  Ayesha Majid (15-SE-65) |
| **Supervisor:** | Dr. Ali Javed  Assistant Professor |
| **Email:** | [ali.javed@uettaxila.edu.pk](mailto:ali.javed@uettaxila.edu.pk) |
| **Abstract:** | With the enhancement of technologies in various fields, our lives are directed to the intelligent and smarter regime. We want an independent lifestyle despite our physical impairments. This gives rise to dealing with increasing issues in the medical field. Around 285 million people in the world are visually impaired and 39 million of them are completely blind. Smart Shoe is an android application which will help visually impaired people walk comfortably. It will be integrated with ultrasonic sensors attached on a pair of shoes. These sensors will be used to sense barriers coming in the way of the user wearing the shoes. The system also includes a wearable camera which will detect the obstacles and notify the user about the nature of the object. Not only the present system is beneficial to its market but also its prospects are optimistic. |

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| **Project Title:** | **Smart Social Issue Reporting App** |
| **Students:** | Nawal Chaudhary (15-SE-08)  Aasiya Riaz (15-SE-09)  Aqsa Tahir (15-SE-12) |
| **Supervisor:** | Dr. Ali Javed  Assistant Professor |
| **Email:** | [ali.javed@uettaxila.edu.pk](mailto:ali.javed@uettaxila.edu.pk) |
| **Abstract:** | Smart social issue reporting app is the app through which general public can report all types of social issues that need government assistance to be solved like grafitti, potholes, garbage, burnt-out streetlights etc. to government officials to get them solved through the proper way. It will enable registered users to report any non-emergency social issue by uploading pictures and some brief description about the issue. Location of the reported issue will be obtained using Google map. Whenever the user will report an issue notification on government side app will be sent to the respective head of the department about the issue reported. This project is working for a particular area only at its initial release. This project will help the society by making government and other people aware of the existing problems and help them to solve them in a better way. |

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| **Project Title:** | **Rescue Me: Earthquake Monitoring Application** |
| **Students:** | Asma Ikram(15-SE-10)  Tanees Riaz(15-SE-26)  Fouzia Noor(15-SE-44) |
| **Supervisor:** | Dr. Ali Javed  Assistant Professor |
| **Email:** | [ali.javed@uettaxila.edu.pk](mailto:ali.javed@uettaxila.edu.pk) |
| **Abstract:** | **“Rescue Me”** is an android applicationwhich is used to monitor the earthquake by getting magnitude and intensity information of the earthquake by using an earthquake API. It helps its users to get notified when an earthquake occurs. It also maintains a database of previously occurred earthquakes. It helps the users to send a previously composed help message which also contains user's location to seek help in case, he is in danger. Application shows the information of earthquakes such as the magnitude, direction and intensity on Google maps. It also shows the location of recently occurred earthquakes on the Google map. This application also helps its users to connect to social media applications such as Facebook in order to notify other people about their safety. User first needs to get himself registered by making an account on the application and then he can use the feature of Rescue Me application. |

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| **Project Title:** | **A Security Framework using Facial Recognition and Person Re-identification** |
| **Students:** | Izza Azam (15-SE-13)  Usman Akhtar (15-SE-83)  H. Abu Bakar Nazir (15-SE-89)  Bilal Ahmed (15-SE-93) |
| **Supervisor:** | Engr. Dr. Syed M. Anwar  Associate Professor |
| **Email:** | s.anwar@uettaxila.edu.pk |
| **Abstract:** | Person Re-Identification is constant matching images from different non-overlapping camera views captured by sensors. Challenges area unit bestowed within the style of advanced changes of illuminations, posture, point of view, blurring effects, image resolutions, camera operations, occlusions and background muddle across camera’s viewpoint. In this intended system, these problems are been addressed using Convolutional Neural Network (CNN) along with its VGGNET architecture. This architecture is efficient in extracting features from images. CNN are being used for this purpose in order to provide the higher accuracy especially in crowd-based areas. CNN provides better optimized results in case of image driven tasks and it is simply precise and simple architecture to work with. CHUK03 dataset is used in order to test and train our intended system. This system provides security surveillance in crowd-based area with much better accuracy. |

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| **Project Title:** | **3D Model Framework of Web Store Products in Augmented Reality** |
| **Students:** | Hafiz Mudassir Ali(15-SE-76)  Muhammad Shoaib(15-SE-14)  Muhammad Tayyab(15-SE-86) |
| **Supervisor:** | Dr. Ali Javed  Assistant Professor |
| **Email:** | ali.javed@uettaxila.edu.pk |
| **Abstract:** | Online shopping has become a trend in this modern age nowadays people prefer to buy products they want while sitting in the houses without making the effort to go to any store. Online web store provides 2D images of the products to give visual description of product which does not allow users to have a better understanding of the product which results in customers avoiding online shopping but with the technology of Augmented Reality users can experience the product in 3D with reference to real world making it possible for user to feel closer to product. But for an average seller to develop new 3D models as well as converting already available products into 3D is very expensive process, this 3D model framework can assist sellers by enabling them to create 3D models as well as implement these models into the web store without any professional help. |

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| **Project Title:** | **Point of interest navigation using augmented reality** |
| **Students:** | Tuba Gul (15-SE-15)  Hamza Jamal (15-SE-39)  Aamir Shehzad (15-SE-69)  Muhammad Usman (15-SE-94) |
| **Supervisor:** | Dr. Syed Muhammad Anwar  Associate Professor |
| **Email:** | s.anwar@uettaxila.edu.pk |
| **Abstract:** | An application for the people who are new to a market or building. This will help the user to navigate and reach to certain destination. We have applied augmented reality techniques to implement the idea of navigation within a building i.e. indoor navigation. We have keenly analyzed the current market value and current market survey of the product in this report. The application joins the co-ordinates in the real world to provide location and direction to its client in the physical world. We have utilized different surveys to come up to something like this navigation application which could provide a great help to people who are visiting a place for the first time or rarely visit that particular building. We are sure about the utilization and usefulness of the application as it provides a great facility and is really helpful. Moreover, we are hopeful that our work is a useful addition to the work previously done in this field. |

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| **Project Title:** | **Android Application for Fashion Image Retrieval using Deep Learning** |
| **Students:** | Areeha Farooq (15-SE-19)  Adina Ahmad (15-SE-25)  Mehreen Arshad (15-SE-29)  Ayma Shakeel (15-SE-33) |
| **Supervisor:** | Engr. Dr. Syed Muhammad Anwar,  Associate Professor |
| **Email:** | [s.anwar@uettaxila.edu.pk](mailto:s.anwar@uettaxila.edu.pk) |
| **Abstract:** | Business volume of online shopping has grown in the last few years and it seems that this trend will be maintained in the future. Searching through all the available items to find the one that fits the needs and demands can be hard and time consuming for customers. This project is based on development of an android application which provides an attractive interface to the user who can either be a fashion designer/artist or a customer by using search-by-image facility. So, to be able to find desired clothing item by using this functionality will make the online shopping experience more time saving, productive and efficient. The development of this project focuses on a fashion e-commerce platform provided to the user and specifically with the integration of deep learning model with android platform. The application will be able to get real-time images and will then classify them by using deep CNNs (Convolutional Neural Networks) model fed to it. The integration process is implemented using state-of-the-art TensorFlow API. |

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| **Project Title:** | **INDUS: An AI-Web Innovation for Smart E-commerce** |
| **Students:** | Armughan Ahmad (15-SE-20)  Muhammad Ali (15-SE-56)  Daniyal Mushtaq (15-SE-80) |
| **Supervisor:** | Engr. Dr. Syed Muhammad Anwar  Associate Professor |
| **Email:** | s.anwar@uettaxila.edu.pk |
| **Abstract:** | In this project artificial intelligence and machine learning techniques are applied innovatively to an ecommerce website introducing a new perspective to online shopping with artificial agents. This project presents an aspect of negotiating and bargaining online and features a bargain-based e-commerce website, where chatbot act as a shopkeeper and can negotiate the price of the product with a customer and a content-based recommendation system that recommends similar products based on product attributes and description rather than on likings and ratings of customer. The chatbot is developed using deep learning algorithms combined with the natural language processing techniques and recommendation system is developed using natural language processing algorithms. This project is implemented using modern tools and technologies Python, Flask and Machine learning libraries Scikit-Learn and Keras. |

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| **Project Title:** | **A Multiplayer Strategy Game: Battle of Kingdoms - The Royal Riot** |
| **Students:** | Tehniyat Leeza (15-SE-59)  Rabeea Waheed (15-SE-22)  Iqra Khurshid (15-SE-105) |
| **Supervisor:** | Dr. Huma Qayyum  Assistant Professor |
| **Email:** | huma.ayub@uettaxila.edu.pk |
| **Abstract:** | The Royal Riot is a 3D game in which the character is supposed to move step by step through the arena of game while fighting with enemies and handling them in a way that success is for sure of the character. The major purpose of developing this type of game is to focus on the historical character that successfully owns a castle at the end. Moreover, unity 3D and 3D game development is much popular these days among the users that’s why choosing this type of game is beneficial for introducing in market and deployment in the industry. This game consists of sequenced levels (story based) and the character owns a castle at the end of his victory. |

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| **Project Title:** | **An Automated System for Outcome Based Education Assessment** |
| **Students:** | Ifrah Ehsan (15-SE-27)  Ahsan Abdul Salam (15-SE-67)  Tuzak Rehman (15-SE-91)  Jawad Arif (15-SE-99) |
| **Supervisor:** | Engr. Tasawer Khan  Lecturer |
| **Email:** | [tasawer.khan@uettaxila.edu.pk](mailto:tasawer.khan@uettaxila.edu.pk) |
| **Abstract:** | An Automated System for Outcome Based Education Assessment – is an online website. It is developed to automate the Outcome Based Education activities and to manage the teaching and learning process. The drawback of using manual OBE system is that the information being stored at different places and excel sheets are used as a temporary software. Through the automation paperwork will be minimized, data will be less redundant and consistent. The system will help the faculty to generate results effectively and accurately, moreover students can easily view their results and check their attainment in course learning outcome and program learning outcome. |

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| **Project Title:** | **A web app to hire technician at your door step** |
| **Students:** | Kamran Imtiaz (15-SE-42)  Dilshad Khaliq (15-SE-30)  Ussama Rahman (15-SE-84) |
| **Supervisor:** | Engr. Huma Ayub  Assistant Professor |
| **Email:** | [huma.ayub@uettaxila.edu.pk](mailto:huma.ayub@uettaxila.edu.pk) |
| **Abstract:** | We are going to develop a website where people who are having problems with their gadgets, home appliances and etc. can find and connect with the Technician, Mechanic or Electrician to seek help. Both sides win by our project. Experts will have more reach and open market and peoples will find the expert easily without any hassle of going to the market for finding one. People can register on our website and post the request explaining their problem in respective niche. In the response experts of respective fields who are available will send request. Then he/she will hire an expert for that job. He/she can see the expert profile to check his/her experience and reviews. |

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| **Project Title:** | **Fast Food Shop (Sales Analyzer)** |
| **Students:** | Arshia Saleem (15-SE-31)  Muhammad Tauqir Rao(15-SE-63) |
| **Supervisor:** | Engr. Tasawar Khan  Lecturer |
| **Email:** | tasawerk@gmail.com |
| **Abstract:** | In this project a system for fast food shop is build. The purpose of this technology is to make it economical for small shop owners to get a system to make things manageable and disciplined.  For our project, we have chosen to remove this barrier of not getting access to technical system for one’s fast food shop because of price. Moreover, we are embedding in the latest technologies to our system to make it more efficient. This project can prove as a first step to enter the market with a good product to offer along with a very economical rate.  The report will justify and discuss in detail why we chose this project and what are our research regarding current system in the industry and how our system is best fit in market. |

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| **Project Title:** | **HomeShop** |
| **Students:** | Muhammad Suleman (15-SE-62)  Muhammad Hamza Naeem (15-SE-34) |
| **Supervisor:** | Dr. Ali Javed  Assistant Professor |
| **Email:** | [ali.javed@uettaxila.edu.pk](mailto:ali.javed@uettaxila.edu.pk) |
| **Abstract:** | The project is all about a startup idea in which we are selling online products of daily usage like Fruits, Vegetables, Grocery, Electronics and Stationery. The different thing is that we don’t have any inventory, we will be buying from the retailers and dropping the products at your doorstep. As the time passes we would like the retailers to get registered. We will be developing a website to achieve all goals. Mobile application will also be available. |

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| **Project Title:** | **Brain Tumor Detection using Image processing Techniques** |
| **Students:** | Ameer Hamza (15-SE-37)  Basit Aziz(15-SE-61)  Ali Riaz(15-SE-87) |
| **Supervisor:** | Dr. Huma Ayub  Assistant Professor |
| **Email:** | huma.ayub@uettaxila.edu.pk |
| **Abstract:** | Today image processing plays an important role in medical field and medical imaging is a growing and challenging field. Medical imaging is advantageous in diagnosis of the disease. Many people suffer from brain tumor, it is a serious and dangerous disease. Medical imaging provides proper diagnosis of brain tumor. There are many techniques to detect brain tumor from MRI images. These methods face challenges like finding the location and size of the tumor. To detect the tumor from the brain is most important and difficult part, image segmentation is used for this. Already, various algorithms are developed for image segmentation. |

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| **Project Title:** | **Development of an endless android game: Super Pilot** |
| **Students:** | M. Ali Shan (15-SE-38)  Malik Muhammad Aamir (15-SE-51) |
| **Supervisor:** | Engr. Maria Andleeb  Lecturer |
| **Email:** | [maria.andleeb@uettaxila.edu.pk](mailto:maria.andleeb@uettaxila.edu.pk) |
| **Abstract:** | Super pilot android game is an endless game. The player would be a rocket with controls of up, down, right, left. The score of the player will be counted as the number of coins that it will collect. Environment of the game is eye-catching which contains Sky-Scraper buildings. Player has to avoid hurdles. The life of the player will be finished if it get collision with hurdles. The purpose of this project is to promote the Super Pilot Android Game among worldwide gamers. This game will provide entertainment to gamers of all ages. Game has no all-time playing addiction so it will not disturb the present and future of gamers. |

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| **Project Title:** | **TruckReem (Online Loader Vehicle Booking System)** |
| **Students:** | Nauman Masood (15-SE-40)  Awais Javed (15-SE-52) |
| **Supervisor:** | Dr. Ali Javed  Assistant Professor |
| **Email:** | [ali.javed@uettaxila.edu.pk](mailto:ali.javed@uettaxila.edu.pk) |
| **Abstract:** | The highly unorganized trucking industry has made shipping goods for customers a tedious task. Problems in finding a transparent logistic network has caused goods movement through multiple stakeholders of the trucking industry. This has resulted in delay of loading, transporting and unloading of goods. Which further increases transportation cost to meet the cost demands of all the stakeholders in the network. To solve the above-mentioned problem, we have developed a web & android based solution named as Truck-Reem. In this system customers can view available loader vehicles book them, see drivers’ profile and sign up as a driver as well. Our newly developed system will make sure that in the present world of web, people will have the ability to book loader vehicles online from their smartphone and the transportation association as the whole of their arrangements are as of now directed by methods for an automated structure which infers they have an electronic record of future and outstanding arrangements. Our system will provide detailed tracking of their logistics along with the driver and his vehicle, and for drivers the system will provide detailed navigation for pick and drop points. The Apps will generate digital receipts for both the customer and driver, the calculation of fare is dependent on the type of the vehicle as what kind of the vehicle is being used to carry out e.g. there are 3 basic types of fare’s 1) Distance based 2) Time Based 3) Mixture of Time and Distance. Hence the system is a complete solution for this industry and provides very easy way for all the people involved in trucking industry. |

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| **Project Title:** | **Biometric of Employee Attendance Management System** |
| **Students:** | Aamir Sohail (15-SE-41)  Asad Ashfaq (15-SE-57) |
| **Supervisor:** | Dr. Huma Ayub  Assistant Professor |
| **Email:** | huma.ayub@uettaxila.edu.pk |
| **Abstract:** | The B-Attendance System (ERP System) is designed to help for keeping data, storing data, manipulating data and analyzing the data of employees. Admin can monitor and handle the information within less time. The main problem that we covered in this system is to organize data from different environments and integrate it at one place. This system will fully automated that will record the attendance of employees etc on daily basis as well as monthly and yearly basis. This management system based on web application, desktop application as well as Android Application. This management application makes the information handling light weight and less complex. In future, this system can be expanded to provide more features. |

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| **Project Title:** | **Cause and Issue Management System** |
| **Students:** | Faisal Sabir (15-SE-47)  Malik Ghulam Mujtaba (15-SE-79)  Usman Javed (15-SE-81) |
| **Supervisor:** | Engr. Mubashir Ayub  Assistant Professor |
| **Email:** | mubashir.ayub@uettaxila.edu.pk |
| **Abstract:** | This project aims at comparison of the old technologies and the latest technologies emerging in the market and have knowledge and implementation experience on them. And to provide a solution to the problem that is Cause and Issue Management. The developed application will provide a platform to the people by which they can raise their issue and other people who are facing the same issue or in favor can support them. The issue getting the high support will be considered for the solution. The Application is developed in Model View Controller frame work so it is easy to manage the code and modify it if required in the future. Mongo DB is used for data storage which is faster than SQL and Storage efficient. |

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| **Project Title:** | **A Web App For Online Legal Assistance** |
| **Students:** | Muhammad Sheraz Khan (15-SE-48)  Samiullah (15-SE-72) |
| **Supervisor:** | Engr. Tasawar Khan  Lecturer |
| **Email:** | tasawer.khan@uettaxila.edu.pk |
| **Abstract:** | A ‘Web App for Online Legal Assistance’ is the system which provides an online platform to the people who are fighting their cases in courts. The system will help them to find the top lawyers in their respective court. It will also save them from visiting their chambers and asking from different individuals about their reputation. This system is of its first kind in Pakistan but it has already been implemented in other different countries in different ways. This project is developed after interviewing many lawyers about the feasibility and what they have expected of this system. |

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| **Project Title:** | **Commercial Insurance App using AI** |
| **Students:** | Ayesha Imran (15-SE-50)  Anum Rafaqat (15-SE-66)  Maria Mushtaq (15-SE-75)  Fatima Sarwat (15-SE-102) |
| **Supervisor:** | Dr. Ali Javed  Assistant Professor |
| **Email:** | [ali.javed@uettaxila.edu.pk](mailto:ali.javed@uettaxila.edu.pk) |
| **Abstract:** | **“Commercial Insurance App using AI”** is an android applicationwhich is an industrial project for the company Takaful Emarat. This insurance app would tell us about different insurance policies that the company is offering in a very representable way. This app would find out the driving patterns of the drivers and classify them as good or bad drivers using Deep learning model. This feature would help the company to estimate the premium for car insurance of that particular driver. This app has an extra feature that allow us to predict our health using the health calculator by answering few questions. Moreover, this app would allow its users to use Chatbot and get to know about different policies and queries regarding Takaful Emarat insurance. |

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| **Project Title:** | **Chartbot for Heart Disease prediction using Mahine Learning and A.I.** |
| **Students:** | M. Kashif Latif (15-SE-98)  Ateeq Ur Rehman (15-SE-104) |
| **Supervisor:** | Engr. Dr. Syed M. Anwar  Associate Professor |
| **Email:** | [s.anwar@uettaxila.edu.pk](mailto:mudassar.ali@uettaxila.edu.pk) |
| **Abstract:** | Objectives: An intelligent information technology-based system could have a positive impact on the life-style of patients suﬀering from chronic diseases by providing useful health recommendations. In this paper, we have proposed a hybrid model that provides disease prediction to cardiac patients. It aims at implementing a prediction model, that can identify the disease of a patient and classify it into one of the four output classes i.e., non-cardiac chest pain, silent ischemia, angina, and myocardial infarction.  Methods: The recommendations are generated by assessing the severity of clinical features of patients, esti-mating the risk associated with clinical features and disease, and calculating the probability of occurrence of disease. The purpose of this model is to build an intelligent and adaptive recommender system for heart disease patients. The experiments for the proposed recommender system are conducted on a clinical data set present on kaggle.com website named as heart.csv.  Results: The performance of the proposed prediction model is evaluated using accuracy and kappa statistics as evaluation measures. The accuracy of the model is 99%.  Conclusion: The proposed system exhibits good prediction and promises to be a useful contribution in the field of e-health and medical informatics. |

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| **Project Title:** | **An end to end framework to smartly handle restaurant operations** |
| **Students:** | Muhammad Ahsan (15-SE-103)  Muhammad Jawad ul Hassan(15-SE-101) |
| **Supervisor:** | Engr. Dr. Syed M Anwar  Associate Professor |
| **Email:** | [s.anwar@uettaxila.edu.pk](mailto:s.anwar@uettaxila.edu.pk) |
| **Abstract:** | This project is based on the concept of using state of art technology to computerize all restaurant operations including reservations, management, ordering, billing and payment. We have developed E-menu along with recommendation system for food ordering. The patron will be able to place order through user interface which will then directly rooted to kitchen via a central server. The kitchen will have an interface showing order details and orders will be prepared based on priority (first come, first serve). After order completion, the waiter will be notified to serve the order. The management will be able to keep track of restaurant’s performance on real time. An android app is developed for making reservations. We have also developed a website for providing more information about the restaurant and patron will be redirected to restaurant’s website by scanning QR code through UI. |

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| **Project Title:** | **Driving Simulator of Autonomous Vehicle using OpenCV and Deep Learning** |
| **Students:** | Aqsa Masood (15-SE-17)  Fatima Farooq (15-SE-11) |
| **Supervisor:** | Dr. Huma Ayub  Assistant Professor |
| **Email:** | huma.ayub@uettaxila.edu.pk |
| **Abstract:** | Driving simulator can be best used for driver training purpose and for avoiding road accidents. Now a days, many big companies are working on Autonomous Vehicles. Different vehicles demand different object detection e.g., a car requires basic detection like other vehicles, pedestrians, a snow clearing truck requires to mainly detect snow.  So, there is a need to develop driving assistance simulator that can help drivers to get an experience of sitting in autonomous vehicle with various scenarios e.g., city, rural highway, mountain roads, and alleys. The proposed system allows driver to switch to manual driving when the need arise in an autonomous vehicle. The driver in vehicle finds the highlighted lane and detectable objects on the road as well as on roadside in the simulated environment. Driver would be capable of driving in such scenarios, where they can get warnings in case of traffic violation and getting instructions for driving. |

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| **Project Title:** | **TRAGO online cycle sharing system (Hardware)** |
| **Students:** | Mubeen Gul Zafar (15-SE-18)  Aashir Farooq (15-SE-96)  Zameer Abbas (15-SE-84R) |
| **Supervisor:** | Engr. Muhammad Bilal  Lecturer |
| **Email:** | 17F-PhD-SE-17@uettaxila.edu.pk |
| **Abstract:** | Basically, the idea is based on concept of shared economy where people use all facilities because it is economically affordable. **Online Cycle Sharing** is application through which the customers can ride on cycle and can travel to anywhere in limited boundaries for any limit of time by few clicks in application that we are devolving. It is online system through which customer can view available cycles at various location around his location just like UBER or CAREEM and scan the QR code and it will unlock the cycle for ride. As the system involves hardware so we are working on hardware side of this project |

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| **Project Title:** | **TRAGO online cycle sharing system (Software)** |
| **Students:** | Adnan Rahim (15-SE-100)  Waqar Azim (15-SE-32) |
| **Supervisor:** | Engr. Muhammad Bilal  Lecturer |
| **Email:** | mbilal@uettaxila.edu.pk |
| **Abstract:** | Basically, the idea is based on concept of shared economy where people use all facilities because it is economically affordable. **Online Cycle Sharing** is application through which the customers can ride on cycle and can travel to anywhere in limited boundaries for any limit of time by few clicks in application that we are devolving. It is online system through which customer can view available cycles at various location around his location just like UBER or CAREEM and scan the QR code and it will unlock the cycle for ride. |

**The End**

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