					Equipment Required							
No	**Supervisor**	**Co-supervisor**	**FYP Title:**	**Description / Objective/ Scope skill required (if applicable)**	**Hardware**	**Software/ Tool**	**Special Requiremnet**	**Industrial Links**	**Community project**	**Suitable for courses**	**Remarks (if any)**	**Multidisciplinary project**
4	Mariam Nainan (mariam@utar.edu.my)		Web-based system for teaching and learning SQL SELECT statements	Description/ Objectives/ scope: Currently a system for learning SQL SELECT statement has already been developed. It is desktop-based and it developed using C# in .NET framework. This project will start with an in-depth evaluation of the existing system by gathering feedback from instructor and students on the shortcomings of the system (e.g. in terms of user interface design and visualisation of database tables, more advanced commands) and how to improve it. The system will also be changed to a web-based version. The system must also take into consideration what problems students have when learning how to SQL statements and try to address these problems. The system must also provide necessary information about the database tables and columns that are relevant for the particular problem the student is trying to solve. Instructors must be able to use the system to create new problems and to add information on database tables and columns relevant to those problems. The system must have an interface that makes it easy for students and instructors to use. Expected deliverables (MUST provide): An improved web-based version of existing system to assist students learning SQL statements on how to create SQL statements for given problems and for instructors to specify the problems and answers and relevant database table and column information. Skill required (if any): Good knowledge of SQL statements	Laptop and/or computer. Programming IDE	Web-based development system	No	No	No	SE		No
5	Mariam Nainan (mariam@utar.edu.my)		Program development system with hints to assist in solving Python programming problems	Description/ Objectives/ scope: Students learning programming may need assistance in developing Python programs for given problems because they may not know how to write a program from scratch. This project aims to develop a system that will assist students to write programs by providing hints in terms of patterns of code that are applicable for the particular problem. The instructor will use the system to create problems together with hints on how to solve the problem in the form of applicable code templates. The instructor will also use the system to create common code templates. The student will use the system to create programs for the problems guided by hints (on demand). Whenever the student request for a hint, the system will show the applicable code templates. She will be able to study them, select the applicable patterns to add to her code, and fill in the details for the specific problem. Expected deliverables (MUST provide): A system to assist students learning Python programming to create programs with hints given on demand and for instructors to specify code templates and problems with hints. Skill required (if any):	Laptop and/or computer. Programming IDE	Preferably web-based development system	No	No	No	SE		No

No	Supervisor	Co-supervisor	FYP Title:	Description / Objective/ Scope skill required (if applicable)	Hardware	Software/ Tool	Special Requiremnet	Industrial Links	Community project	Suitable for courses	Remarks (if any)	Multidisciplinary project
6	Mariam Nainan (mariam@utar.edu.my)		Guided sentence construction system for learning English grammar at university level	Description/ Objectives/ scope: Students learning how to write English sentences need to be guided with information on proper grammatical structure. This project aims to develop a system that will guide students to write sentences by explaining the proper grammatical structures and helping students construct sentences that adhere to those structures. The instructor will use the system to create different grammatical structures and lists of words to be used for sentence construction. The student will use the system to construct proper English sentences based on different grammatical structures. Expected deliverables (MUST provide): A system to guide students learning English grammar to construct sentences based on different grammatical structures and for instructors to specify grammatical structures to be learnt. The target students are those learning English at unversity level. Skill required (if any):	Laptop and/or computer. Programming IDE	Web-based development system	No	No	No	SE		No
7	Mariam Nainan (mariam@utar.edu.my)		System to assist in analysis and design of programming problems	Description/ Objectives/ scope: Students learning programming may need assistance in learning how to analyse a problem (i.e. break the problem into sub-problems) and to build up the design of the solution program based on these sub-problems. This project aims to develop a system that will be used by students when they start to solve a programing problem. The system will guide the student to perform analysis of the problem and the design of the solution. It will be used by the instructor to define problems and answers with guides. Expected deliverables (MUST provide): A system for students learning programming to assist in analysing given problems and in designing solution programs and for instructors to specify problems and guided answers. Skill required (if any):	Laptop and/or computer. Programming IDE	Web-based development system	No	No	No	SE		No
8	Mariam Nainan (mariam@utar.edu.my)		System to visualise program execution flow in C++ program code	Description/ Objectives/ scope: Students learning structured programming need to understand the program execution flow in terms of control structures and function calls. Students may have difficulty in visualising the program execution flow from the static program code. This project aims to develop a system that helps students visualise the program execution flow of programs that they create. The student will create a C++ program and specify control structures and function calls. The system will generate a visualisation of the possible program execution flows based on the control structures and function calls in the program. Expected deliverables (MUST provide): A system for students learning structured programming to create C++ programs and visualise the execution flow of those programs. Skill required (if any):	Laptop and/or computer. Programming IDE	Web-based development system	No	No	No	SE		No

No	Supervisor	Co-supervisor	FYP Title:	Description / Objective/ Scope skill required (if applicable)	Hardware	Software/ Tool	Special Requiremnet	Industrial Links	Community project	Suitable for courses	Remarks (if any)	Multidisciplinary project
11	Chean Swee Ling (cheansl@utar.edu.my)		A Web-based Code Analysis Tool for Introductory Programming	Description/ Objectives/ scope: In computer science, code analysis is the process of automatically analysing the behavior of computer programs. Code review software checks source code for compliance with a predefined set of rules or best practices. Two approaches, static and dynamic, are used to analyse code. Programming novices always face problems of correctness and robustness when writing code. It's believed that code analysis tool can help them correct their mistakes and improve their code through the useful feedback. Expected deliverables (MUST provide): A functioning prototype that consists of : - source code management - code analysis engine - code review generator skill required (if any): Introductory Programming Languages, Syntax Tree Generator, Web Application Development	Laptop and/or computer. Programming IDE	Web-based development system	No	No	No	SE	Nil	No
14	Lee Poh Foong (leepf@utar.edu.my)	Chean Swee Ling	Web based game navigation with heart rate on nurturing young adult kindness	Description/ Objectives/ scope: Modern day, majority young adult are growing up with gadgets. This culture has brought lots of problem such as impatient, low in attention which bring down the kindness level. Therefore, to follow the flow which allowing them to use internet and have fun with games, this web based games which a specific character will be navigated with the heart rate of the person. This will train the person to stay calm in any situation with a positive mood, kindness to score in the games. Expected deliverables (MUST provide): - A functioning web base game -a game designing with kindness training, and a character in it will be interfaced with heart rate of the person for navigation instead of keyboard. skill required (if any): Web based platform application development	Laptop and/or computer. Programming IDE	Web-based development system	No	No	No	SE	Nil	No
15	Simon Lau (simonlau@utar.edu.my		Modeling and Simulation of Cloud/Edge Computing Infrastructures and Services for Resource Scheduling Optimization in Internet of Things (IoT)	Project description: The student is expected to experiment and generate performance metrics results with cloud/fog computing simulator such as iFogSim, CloudSim etc. some published resource allocation algorithm/scheme designed for Internet of Things (IoT) applications. The student is expected to do extensive literature review of current state-of-the-art of the resource allocation algorithms/schemes available via research publications Expected deliverables: Simulation results of performance metrics of some resource allocation algorithms/schemes Research publication of simulation results (encouraged but optional) Skill required: Research and literature survey skills Coding skill depending on the simulator used (Matlab, IFogSim - Java, CloudSim, FogTorch etc.)	Laptop and/or computer. Simulator software		No	No	No	SE	Approved in previous trimester.	No

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16	Simon Lau (simonlau@utar.edu.my		Design and Development of Internet of Things Data Integration Platform	Project description: IoT data available currently comes in different format and schema due to the heterogeneity in design by different vendors/systems. As a result, it is a headache for data science when wanting to perform a holistic data analysis combining data from these various sources in realising smart applications such as smart city. Hence, there is a need of a "broker" entity or so called data "translator" or "integrator" to help pre-process the data into an integrated format so as for data analytics to be performed. Expected deliverables: A software prototype (server-side API based app) developed using either Javascript/Nodejs or PHP or Python. The prototype has to be able to at least successfully combine and integrate two heterogeneous data sources into one which is ready to be processed via other data mining techniques. Skill required:	Laptop and/or computer. Programming IDE		No	No	No	SE	Nil	No
17	Simon Lau (simonlau@utar.edu.my		Design and Development of a Health Remote Monitoring System	Project description: Today, it is very common for us to be able to measure our health vital signs such as heart rate, blood pressure, ECG etc. using smart devices such as a smart watch (Apple Watch, Android Watch etc.). The readings from the device has to be remotely transferred to and stored in the cloud for further analysis and processing. In this project, we aim to develop a Web-based visualization dashboard to display and show the vital signs data in a human readable form. Expected deliverables: A Web dashboard for medical personnels (e.g. doctors, nurses) to visualize health paramters from a smart watch (such as heart rate, blood pressure, ECG etc.) A mobile application that can transmit health vital sign data from smart watch to remote cloud server as well as the Skill required: Web programming skills which include front-end (Javascript/Angular) and back-end (PHP / Python / Javascript/Nodejs) Front-end HTML/CSS/ Javascript/Angular			No	No	No		Nil	No
21	Hoo Meei Hao (hoomh@utar.edu.my)		Design and development of Personal repository app for essential oils	Description/ Objectives/ scope: Essential oils are used as natural remedies for various conditions and claimed to have many healthy benefits in psychological or physiological. There are more than 50 essential oils and its blends that give difficulties to users to remember its benefits and usage. This project is about a design and development of persoanl-based repository to store the data of essential oils that are shared among the group in the social network in order to ease the user to find the required essentials. Expected deliverables (MUST provide): - import the chinese data that are shared in the social network to the web repository. Basic data of essential oils such as its description, main functions/ purposes, method of use, and application guidelines. - mobile based development to help the users to filter and search the required product (essential oil) - able to suport dual-language (English and Chinese) in display. Skill required (if any): Cross-platform mobile application development	laptop/computer/ smartphone	word, power point, mobile-based development tool	No	No	No	SE	know chinese language (read/ write)	No

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22	Hoo Meei Hao (hoomh@utar.edu.my)		Design and development of persuasive technology in mobile application promoting saving habits	Description/ Objectives/ scope: This project is about the design and developemnt of a personal mobile budget app that include the primary task support, dialogue support and social support to influence the behaviour or attitude of users in saving money. Main tasks involved: - review mobile finanace apps; - review the currrent impact of persuasive technology to promote saving habits, health and well-being; - design of self-monitoring that helps the user to keep track of its own achievements and goals. - determine persuasive features to support the primary task, dialogue and social; - incorporate the persuasive design into the budget app based on self-reported saving behaviors - evaluate the impact of the new design with the targeted users. Expected deliverables (MUST provide): - a literature review of the related persuasive technology and design - a personal budget app that include of persuasive design skill required (if any): Cross-platform Mobile Application Development	laptop/computer/ smartphone	word, power point, mobile-based development tool	No	No	No	SE		No
23	Hoo Meei Hao (hoomh@utar.edu.my)		Design and development of Activity scheduler and Attendance for a Community NGO	Description/ Objectives/ scope: This project is about a design and development of activity scheduler to inform monthly, yearly and adhoc acvitiies to the members in the community ,such as exhibition, talks, youth meetings, study and discussion meetings etc Scope: posting of monthly/ yearly/ adhoc activities, notification/ reminder of the coming activity, confirmation to attend/ sign-up for an activity, control access of activity in different area, managing the questions posted by the members about the event/ activity. Expected deliverables (MUST provide): - A Web dashboard for admin of an area to post and confirm the activity run in the area. - A mobile application for the members to view the confirmed activities and get reminder on the coming activities. skill required (if any): web application development, Cross-platform mobile application development	laptop/computer/ smartphone	word, power point, web-based development tool, mobile-based development tool	No	No	No	SE		No
24	Hoo Meei Hao (hoomh@utar.edu.my)		Design and development of web Gamification system for UX design course	Description/ Objectives/ scope: This project is about the development of web gamification platform to teach UX design in order to increase studens motivation for putting their best effort into the design course. Expected deliverables (MUST provide): - template of game-like features with essential elements of goal, feedback, rules , motivation and rewards. - platform for course leader to customise course content into the games elements. - tracking analytics to discover the most active and best performing players(learners) skill required (if any): web application development	laptop/computer	word, power point, web-based development tool	No	No	No	SE		No

No	Supervisor	Co-supervisor	FYP Title:	Description / Objective/ Scope skill required (if applicable)	Hardware	Software/ Tool	Special Requiremnet	Industrial Links	Community project	Suitable for courses	Remarks (if any)	Multidisciplinary project
25	Michelle Beh (behhc@utar.edu.my)		Design and Development of a Book Swapping Mobile app	Project description: Currently there are a number of book exchange events organised by avid readers at different physical places in Klang Valley. It will be quite inconvenient for book enthusiasts from other states to travel the physical book exchange events that are held in Klang Valley. The main goal of the project is to provide a platform for book enthusiasts to swap books that are no longer in used for a book that they really want. Instead of throwing the unwanted books away or recycling them, this mobile app serves a convenient way for book lovers to search and swap a book at their fingertips. Expected deliverables: - A mobile app that allows book searching, scanning and swapping. It should also allow users to insert a comment or review for any books. - A Web app that allows administrator to store books details, manage user accounts, provide notifications on any book swapping, or perhaps to generate a simple report on the books swapping. Skill required: Web and mobile application development	Smartphone/Laptop/ Computer.	Mobile app development system	No	No	No	SE		No
26	Michelle Beh (behhc@utar.edu.my)		Parent-Teacher Communication e-Journals	Project description: Some researches revealed that the role of parent-teacher communcation is crucial to increase student engagement. Student engagement means involvement of students as active participation of students in the learning process. It is believed that communication between teachers and parents is an important support in the child's academic development as well as socialisation. Currently, many school teachers use a written communication in form of a communcation book to interact with the parents. The communication book will be replaced with a new one when a school moves to a higher grade. The communcation book may be misplaced, damaged or replaced. School teachers can be very busy, and find it challenging to keep up with recording the notes in a communcation book. The main goal of the project is to design and implement an application to keep parents and teachers in the loop and enables effective communcation. Expected deliverables: - A mobile application for parents to access to the recorded notes from teachers about their children's progress in school. The parents are able to interact with the teachers by providing feedback or making inquiries. The parents can also make an appointment to meet the teachers. - A Web dashboard is required to enable school teachers to administer children's academic progress by recording notes, reviewing parents' feedback, handling inquiries, and analysing student's progress. Skill required: Cross platform mobile application development, Web application development	Smartphone/Laptop/ Computer.		Need to engage with school teachers for conducting this study as well as the validation of the requirements and the prototype	No	SE			

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27	Michelle Beh (behhc@utar.edu.my)		My Mood Tracker	Project description: Mood tracking, negative thoughts, and behaviours are so important for one's positive wellbeing and mental health, as well as mental illness recovery. The aim of the project is to design and develop a mobile application to help people track their moods, thoughts, and behaviours, at any time.This application helps people to stay attuned to their thoughts and feelings, and learning more about themselves and becoming more mindful. It also helps people to notice patterns and triggers that they may not have been aware of before. Expected deliverables: A functioning app that enables users to capture their daily mood and keep track of their mood records. The app also serves as an avenue for the users to learn to be more self-aware about their moods. Some features include capture your mood with a scale and add description, write your own daily prompts for exercise, mood, gratitude, and etc. Skill required: Cross platform mobile application development	Smartphone/Laptop/ Computer.		No	No	SE			
36	Khor Kok Chin (kckhor@utar.edu.my_		An automated system for classifying conference papers	Description/ Objectives/ scope: Research conference reviewing chair often requires to manually assign research papers to different reviewers based on the topics they handle. This project aims at presenting an automatic approach for classifying conference papers by topics using data mining approaches. Expected deliverables (MUST provide): - a dataset containing important keywords for a few research topics - models for classifying conference papers - an application for classifying conference papers automatically using the best performing model skill required (if any): Java / Python	laptop / computer					SE		
37	Khor Kok Chin (kckhor@utar.edu.my_		Evaluating Bayesian classifiers for Network intrusion detection	Description/ Objectives/ scope: This project aims at evaluating Bayesian classifiers for detecting network intrusions using a banchmark / de facto network dataset. Expected deliverables (MUST provide): - Bayesian classifers for network intrusion detection - Evaluations using proper metrics to determine the best Bayesian classifiers to be employed. skill required (if any): - Java / Python	laptop / computer					SE		
38	Khor Kok Chin (kckhor@utar.edu.my_		An educational android app for identifying animals in zoo	Description/ Objectives/ scope: This project aims at developing an app for kids to learn and recognise different type of animals in zoo. Students are require to collect images of animals, pre-process them into datasets, train and evaluate models empirically. An android app shall be developed eventually based on the results of the emprical study. Expected deliverables (MUST provide): - image datasets containing different type of animals - a useful model for identifying different types of animals in zoo - a working android app	- laptop / computer - Andorid phone					SE		

No	Supervisor	Co-supervisor	FYP Title:	Description / Objective/ Scope skill required (if applicable)	Hardware	Software/ Tool	Special Requiremnet	Industrial Links	Community project	Suitable for courses	Remarks (if any)	Multidisciplinary project
39	Michelle Beh (behhc@utar.edu.my)		Features Engineering in Data Analytics using Python	Data is the 'fuel' and data analytics is the 'engine' that drive smart manufacturing. Traditionally, manual works are to be extracted, spotted and selected from massive columns of records to perform machine learning. This project focuses mainly on the research of features engineering, which is the process of using domain knowledge of the data to create features that make machine learning algorithms work. It is the basic to the data analytics of machine learning. Expected deliverables: - Student is required to present an extensive literature review and produce an evaluation report - Student is required to develop a demo application by utilizing open source tools (such as Featuretools) to automate the features extraction from a given set of data. Skill required: Good knowledge in Database, Programming Concept and Analytics Skills. Python and Jupyter Notebook will be used for implementation.	Laptop with min. 8GB	Open source tool - Featuretools		Yes (MIMOS)	No	SE	Students with good programming skills and are prepared to self-learning independently will be considered. Discussion with the industrial PIC will be arranged.	
40	Michelle Beh (behhc@utar.edu.my)		Predictive Analytics in KNIME	Consider about all the machines that are operating in a factory throughout the year. Now imagine that, from now on, one of them would fail everyday. What impact would that have for the business? The existing sensors machinery alerts system has been captured the behaviours, with cutting edge data analytics technology, it can provide more informative recommendation to machinery more reliable of effective maintenance. This project is required to use KNIME, an open source analytic platform to perform data analytics for abnormal detection. Expected Deliverables: - Student is required to develop a demo application by using KNIME for Equipment Failure Prediction using IoT Sensor data. Skill required: Good knowledge in Database, Programming Concept (JAVA and Python) and Data Analytics Skills.	Laptop with min. 8GB	Open source tool - KNIME Analytics		Yes (MIMOS)	No	SE	Students with good programming skills and are prepared to self-learning independently will be considered. Discussion with the industrial PIC will be arranged.	
54	Khor Kok Chin (kckhor@utar.edu.my_		Identifying outstanding stocks in Bursa Malaysia with outlier detection techniques	Description/ Objectives/ scope: The project aims at identifying outstanding stocks from a particular sector in Bursa Malaysia. Students will look into a pool stocks of a sector and then gather relevant financial ratios of the companies. Outlier detection techniques will be applied to find outperforming stocks. Evaluations will be conducted to decide the best outlier detection technique to be used. Expected deliverables (MUST provide): - a dataset containing financial ratios of compaies of a particular sector - the best outlier detection technique for the dataset skill required (if any): - Java/Python	laptop / computer	word processing tool, presentation tool, Java, Phyton				SE		
55	Wong Chim Chwee (wongcc@utar.edu.my)		Prediction of missing values in a weather data using machine learning techniques	The objective is to develop an application that can be used for the prediction of missing data values in a weather data set since missing data in a data set is very common in doing data mining and it may affect the outcomes of machine learning process. In this project, student is required to determine and come out with a good machine learning algorithm to fill-in the missing of weather data set. Expected deliverables: A system that is able to optimize the prediction of missing values in weather data set. Skill required: Data mining and machine learning techniques.		word processing tool, presentation tool, machine learning tool						

No	Supervisor	Co-supervisor	FYP Title:	Description / Objective/ Scope skill required (if applicable)	Hardware	Software/ Tool	Special Requiremnet	Industrial Links	Community project	Suitable for courses	Remarks (if any)	Multidisciplinary project
56	Khor Kok Chin (kckhor@utar.edu.my_		Predicting Gross Domestic Product using data mining techniques	Description/ Objectives/ scope: Gross Domestic Product (GDP) is commonly used to measure the economic performance of a country as well as to make comparison among countries. In this project, students will predict future GDP values using data mining algorithms. Prior to prediction, they need to gather important variables relevant to the GDP values. Predicting GDP accurately gains the advantage of knowing the economic boom / recession ahead thus facilitates the investment planning. Expected deliverables (MUST provide): - a dataset containing variables relevant to the GDP values - a data mining algorithm good for predicting the GDP values skill required (if any): - Java/Python	laptop / computer	word processing tool, presentation tool, data mining tool				SE		
57	Wong Chim Chwee (wongcc@utar.edu.my)		Web-based Augmented Reality (AR) Interior Design	Description/ Objectives/ scope: This project is to implement an open platform concept to customers, professionals and decoration companies that will allow customers to scan, detect 3D objects and place them into the real world by using AR technology. The application was created to solve the current problem whereby customers needed to go into showrooms and try to imagine how each furniture would fit into their houses. The application built by the author attempt to solve the problem by creating an augmented reality application which allows customers to insert furniture that looks lifelike into their homes before buying the actual furniture. Also, decoration companies and professionals will be able to promote their collection and services. Expected deliverables (MUST provide): To develop an AR application which allows home users or decoration companies and professionals to see and promote their services. skill required (if any): Familiar with any AR software or Library.		word processing tool, presentation tool, AR framework/ tool	No	No	No	SE		
58	Sugumaran Nallusamy (sugumaran@utar.edu.my)		Mobile and Cloud Based Driving School Management System	Description/ Objectives/ scope: The primary purpose of the project is to develop a driving school management system which can be managed online and monitor the student progress. Expected deliverables (MUST provide): i) Study and examine the currently implemented system by the driving school. ii) Develop an application that consists of the features and design required by the driving school using suitable approach and methodology. iii) Test the developed system by deployed in the actual environment. skill required (if any): familiar with ay cloud based development framework	No							
59	Gunavathi Duraisamy (gunavathi@utar.edu.my)		Software defect management system with priority prediction using multi-factor analysis	Description/ Objectives/ scope: This project is aimed to develop a software defect management system that will automatically predict priority of the defect using multi-factor analysis. Traditionally, testers or test managers will assign the priority based on the behaviour or impact of the defect to the developed system. Since it is done manually, the defect with higher severity could have been missed to cater or put in a lower priority which eventually give an impact to the quality of the developed system or on the release of the product. Thus, an automated prediction using multi-factor analysis is important to help in prioritize the defects. Expected deliverables (MUST provide): - To study and analyse how to determine the software defect's priority using multi-factor analysis that has been proposed or suggested by the literature - To develop a software defect management system which automatically predict the priority based on the multi-factor analysis skill required (if any): - Web application development	PC / Laptop	word processing tool, presentation tool, web development tooll	No	No	No	SE		

No	Supervisor	Co-supervisor	FYP Title:	Description / Objective/ Scope skill required (if applicable)	Hardware	Software/ Tool	Special Requiremnet	Industrial Links	Community project	Suitable for courses	Remarks (if any)	Multidisciplinary project
60	Gunavathi Duraisamy (gunavathi@utar.edu.my)		SCRUM board mobile app	Description/ Objectives/ scope: The aim of this project is to develop a mobile app for SCRUM board. The SCRUM team usually will use physical SCRUM board with sticky notes to track and monitor their user story development and testing according to their sprint cycle. The product backlog and sprint backlog is created and maintain by the SCRUM master either in the excel format or in the system. Every day, the SCRUM team need to discuss and update their progress on the task given in the daily-stand up meeting in front of the SCRUM board. Then the SCRUM master or the team, need to update the progress in the system or excel sheet. By using the mobile app, team will update their progress through the app and the sprint backlog should update automatically. The mobile app also should give notification to the team on the task dateline. The mobile app will show only the user story/ task that being assigned to the user by default and user can update the status of the task from the mobile app. They also can search for other team members task/unassigned user stories to pick up during the sprint. Any update/changes made will be saved and reflect in the web application that serves as the overall project management system to monitor the requirement management and project activities. Expected deliverables (MUST provide): - To develop a mobile app that serve as SCRUM board and notify user on the dateline for task assigned - To develop web application to create and monitor the overall project activities and requirement in product backlog and sprint backlog skill required (if any): Mobile app development , Web based application development	PC / Laptop		No	No	No	SE		
64	Chan Kok Leong (chankl@utar.edu.my)		Mobile app for beginners to learn Mandarin Phonetics (Han Yu Pin Yin)	Description/ Objectives/ scope: This project is to develop a mobile app for beginners to learn how to pronounce Chinese words. Expected deliverables (MUST provide): - lessons to learn - quizzes - ranking with scores skill required (if any): - good in reading and writing Chinese words - mobile app develpment	Mobile phone	word processing tool, presentation tool, mobile development tooll	No	No	No	SE		
65	Chan Kok Leong (chankl@utar.edu.my)		Web-based application for LKCFES lecturers to do venue-booking	Description/ Objectives/ scope: This application is to facilitate/ simplify the booking of the midterm test/ replacement class venues by the lecturers. Expected deliverables (MUST provide): - venues (labs, classrooms, lecture theaters) and capacity registration - on-going classes registration - booking of the venues with number of students, date and time - approval of HOD - booking confirmation - reminders when the date approaches skill required (if any): - web-based application development	PC/ Laptop		No	No	No	SE		

No	Supervisor	Co-supervisor	FYP Title:	Description / Objective/ Scope skill required (if applicable)	Hardware	Software/ Tool	Special Requiremnet	Industrial Links	Community project	Suitable for courses	Remarks (if any)	Multidisciplinary project
66	Chan Kok Leong (chankl@utar.edu.my)		Mobile feedback system for improving facilities in UTAR campus	Description/ Objectives/ scope: Currently students can lodge complaints/ feedbacks against the defects/ out of order on the facilities in the campus using utar portal. It would be more convenient if the students can do it using mobile app. Target users including admin staff at the backend server-side system too. Expected deliverables (MUST provide): - form to fill up the details and description - photos of the defects can be taken down on the spot and attached to the form - feedbacks will be directed to the personnel in charge - user will be updated on the progress of the feedback - user will be updated on the progress done by the person who handles/ resolves the problem skill required (if any): - mobile app development	Mobile phone, PC/ Laptop		No	No	No	SE		
67	Chan Kok Leong (chankl@utar.edu.my)		Mobile app for finding mates and making friends	Description/ Objectives/ scope: This app is to assist people who are still single to find their matching companion/ soul mate or to find suitable people for making friends. Expected deliverables (MUST provide): - profile registration - photos upload - searching for matched people - friend lists - posts skill required (if any): - mobile app development	Mobile phone		No	No	No	SE		
68	Sor Kean Vee (sorkv@utar.edu.my)		Enhanced DIY(Do-It-Yourself) Guide and Creator	Description/ Objectives/ scope: This project is focusing on the enhancement of an existing mobile application. The student needs to focus on video compression techniques and libraries available, alternative databases and contents categorisation. Expected deliverables (MUST provide): An enhanced mobile application that - allows user to include video as part of the content. - provides various categorisation and sorting options. - *other interesting features or enhancements.* skill required (if any): Creativity			No	No	no	SE		
74	Sor Kean Vee (sorkv@utar.edu.my)		Educational Puzzle	Description/ Objectives/ scope: To design and develop an interesting puzzle game to deliver knowledge to player though the game. Student is required to decide the type of knowledge to be delivered to player and perform the necessary research and compilation. Expected deliverables (MUST provide): An mobile game application with collections of knowledge to be delivered. Best to be designed and implemented the structure / framework in the other project, GST. skill required (if any): Extremely creative.			No	No	no	SE		

No	Supervisor	Co-supervisor	FYP Title:	Description / Objective/ Scope skill required (if applicable)	Hardware	Software/ Tool	Special Requiremnet	Industrial Links	Community project	Suitable for courses	Remarks (if any)	Multidisciplinary project
78	Madhavan Nair (madhavan@utar.edu.my)		Web based Application to Manage UTAR World Membership for Center for Extension Education	Description/ Objectives/ scope: The Centre for Extension Education in UTAR conducts many short course for various audience in and out of UTAR. One of the challenge is to keep record of past participations, to inform potential participants about courses offered and creating some form of member retention scheme through discounts, etc. The main objectives are: 1. To develop a web based application to manage and maintain membership of participants 2. To provide process flow suggestions to improve and validate the approval; process 3. To have alert functionalities to specific target members 4. To allow programme owners to manage and retrieve information Expected deliverables (MUST provide): A web based application using Laravel Framework or Frappe. Tracking of approval process and alerts UI/UX that supports dynamic information retrieval Web application hosted on a cloud platform (Google Cloud-Compute Engine / Amazon Web Services) skill required (if any): Familiar wit MVC framework Able to deploy on both Linux and Windows platform. Node Js /Java Script								
79	Sor Kean Vee (sorkv@utar.edu.my)		Treasure Hunt Organiser Resources App	Description/ Objectives/ scope: A mobile application for treasure hunt designed for the use of both organiser and participants in a treasure hunt. Organiser should be able to design and manage activities and participants of the hunt while participants will use the app mostly during the hunting. Expected deliverables (MUST provide): Yes! It's a mobile app. 1. Organiser should be able to store activities or tasks to be completed by participants, with the expected outcomes or results (if applicable) for deciding winners. 2. Participants should be able to see the activities / tasks to be completed, provide outcomes / results / proof of task completion or seek for help if necessary. 3. Organiser should be able to plan and manage schedule of the hunt, including approximate completion time. 4. Organiser should be able to monitor the progress of participants and provide help if necessary. 5. ... to be filled in with your own ideas.... skill required (if any):			No	No	No	SE		

No	Supervisor	Co-supervisor	FYP Title:	Description / Objective/ Scope skill required (if applicable)	Hardware	Software/ Tool	Special Requiremnet	Industrial Links	Community project	Suitable for courses	Remarks (if any)	Multidisciplinary project
80	Madhavan Nair (madhavan@utar.edu.my)		Identifying Depressive Moods of Users Portrayed in Social Media using Structured/unstructured web scraping techniques	Description/ Objectives/ scope: Depression and Anxiety has become a common problem among adolescent and young undergraduate students. Many of these subjects use social media as a platform to express their emotions rather than get professional help. It is therefore important to identify this emotional patterns in advance so that necessary help can be given to them. The main objective of this project is: 1. To identify combination of keywords that indicates anxiety and depression 2. To identify techniques of scraping data from social media to perform text mining 3. To develop an application to indicate the emotional level of people with indication of the level of Anxiety or depression Expected deliverables (MUST provide): skill required (if any): NLTK and NLP Python Libraries								