



**UTM**  
UNIVERSITI TEKNOLOGI MALAYSIA

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**(ISKANDAR MALAYSIA ECOLIFE CHALLENGE)**  
**P1 : DATABASE PLANNING AND SYSTEM DEFINITION**  
**SCSD2523-03: DATABASE**

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## **SYSTEM OVERVIEW**

Iskandar Malaysia Eco-Life Challenge (IMELC) was started as Iskandar Malaysia Eco-Life Challenge in 2013 as a part of a research project funded by the Science and Technology Research Partnership for Sustainable Development (SATREPS). The aim of this research project is to create awareness of Low Carbon Society (LCS) among students, teachers and their families.

At the moment, IMELC was conducted manually. Teachers were called to a venue to be trained. Workbooks are printed and distributed to all the teachers to be given to their students to answer. The workbooks, together with the proofs of other modules were later delivered to a pick up point for the organizer to pick up and checked manually. This is then analysed to get the result of the best 15 schools to go to the final presentation. It will not be practical to run at a nationwide scale. Therefore, a computerized solution with the tailor made system must be developed to incorporate the operation of IMELC to ensure that all the students from the whole country can participate the project. This new project shall simply be called "Ecolife Challenge".

All the contents of the workbook need to be made interactive. The teachers and students can access anytime, anywhere. However, from the trial in 2015, the teachers preferred a computerized solution that can allow them to monitor the students' progress and that they can submit all the relevant documents for the other modules.

## **DATABASE PLANNING**

### **MISSION STATEMENT**

To create a database management system (DBMS) for web based of the Iskandar Malaysia Eco-Life Challenge (IMELC) that create awareness of Low Carbon Society (LCS) among students, teachers and the families in achieving the target of carbon reduction for Iskandar Malaysia by year 2025.

### **MISSION OBJECTIVE**

At the moment, IMELC was conducted manually. In this project, database is used for collecting the answer from questions provided by IMELC so that it can be easily stored, accessed, managed and updated. In this project, it can help to upgrade the student's class activities into the use of technology. Students are needed to use the computer, logging into their individual account that is a web based system and answer the questions online. They need to submit all the relevant answer of the workbook through the system. In this case, we can also reduce the use of papers. Besides this, through this system UTM can also monitor student's activities either they are actively participating this program or not and UTM can also check the answer for each student in the chosen schools for the prize at the end of the program.

## **SYSTEM DEFINITION**

### **SYSTEM BOUNDARIES**

This system won't provide option for user to log report for any problem. However, the system will generate feedback if the user wants to report any problems or improvements for future research. The system also allow organization to give announcement and messaging to alert students and teachers.

While students answer the questions, the system allows the assigned teacher and their parents to monitor them. The parents and teachers have to create an account to monitor but they cannot edit the data. After the users are done filling up the answers, the system will submit the data to the organization for data storage.

The organization will provide or generate e-certificate and report through the system.

### **MAJOR USER VIEW**

Below is the list for major user views:

- **Student**  
The students must fill out the questions provided in the workbook. Throughout finishing the workbook, the teachers and parents can monitor their progression. The answers will be submitted to the Iskandar Malaysia Ecolife Challenge (IMEC) organization.
- **Teachers**  
Each teacher will take care of a class. The teacher will be assigned to monitor the progress of their student's workbook completion and submission. However, the teachers cannot check the answers written by the students.
- **Parents**  
The parents can monitor the progress of their children's workbook. But the parents cannot write or edit the answer that been written by their children. They have to tell and educate the children if they put the wrong answers.

# Asset Management System Gantt Chart

