Student Tracking for Entrepreneurship Program

Philimal Normelissa Ani bt Abdul Malek[1], Mohd Halimi bin Abdul Aziz[2]
[1]Faculty of Computing and Information Technology, Tunku Abdul Rahman University College, Kuantan, Malaysia,
[2]Faculty of Industrial Sciences and Technology, Universiti Malaysia Pahang, Kuantan, Malaysia.
Corresponding email: philimal@tarc.edu.my

Abstract
Student Tracking for Entrepreneurship Program (STEP) is a web based application and information system that can help the government and institutions of education to trace the activities of a student's products in the Entrepreneurship Program. The effectiveness measures based on processing time between the online system compared to conventional processes. Furthermore, the reducing cost through paperless usage and space of data saving through databases using this system has also been studied. STEP will be the best platform for the students to promote their business through the online system using STEP. STEP is developed using PHP, JavaScript and AJAX and MySQL as the central database for this system. This system also uses a hybrid of evolutionary prototyping and reused-oriented, which has five phases in making STEP more attractive and innovative. The encouragement of entrepreneurship and the weakness of current traditional methods have shown the significance of STEP in the business world.

Keywords: Web based application, Online system, Central database

Introduction
Student Tracking for Entrepreneurship Program (STEP) have two types of user access level, that are administrator and student. The administrator can manage all input based on the system's requirement, while the student can edit their business information in the system. STEP will display any event and announcements through this platform and be able to attract participants to view all the business products listed in the STEP.
This system is developed to improve the effectiveness of managing entrepreneurship programs in the university as well as to trace students who have participated in entrepreneurship programs.

Literature Review
Students involved in entrepreneurship become more crucial and relevant[1] in the coming years due to the pandemic for more than two years. Therefore, we need to find a good platform in order to support student entrepreneurship. Some research showed positive contribution by students through the entrepreneurship program in universities[2]. There are some initiatives and programs provided in universities throughout the world and focus on the role and content for entrepreneurship education[3]. There are some issues that students who are involved in entrepreneurship programs could not sustain for longer periods due to certain circumstances, and some studies have shown several mechanisms that can help them survive.
[4,5,6]. Moreover, there are several initiatives that support and promote student entrepreneurship[7-10]. As for the record, some of the large corporations like Google and Facebook were started by university students[11]. In this study, STEP is one of the initiatives

that will help the entrepreneurship students to manage their business more effectively and increase their income through the products that have been advertised using STEP.

Methods

STEP is developed using a hybrid of Evolutionary Prototyping and Reuse-oriented Development. There are six phases which are requirements specification, prototype group which consist of analysis, system design, development and integration, and system validation, before the delivery system phase. This development process using the system is for the system to deliver more faster and satisfy user requirements. The requirement specifications follow a few methods such as interview and survey form to the students.
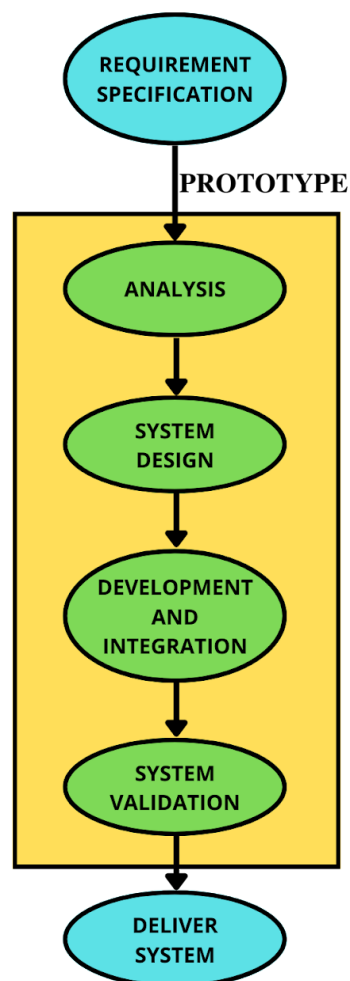

Figure 1. Hybrid of Evolutionary Prototyping and Reuse-oriented Development

Results and Discussion

The web based application consists of Registration Module, User Directory Module, Event Management Module, Gallery Module and Forum Module. The architecture design in STEP is overall related to Student, Facilitators and Administrator.Student and Facilitator sending data to MySQL Database Server and can access to the server to get related information. On the other hand, the Administrator can control the database of STEP. This system will help

students to organize their business by using the platform in STEP and increase the value of their product through this system. Based on the survey distributed through the students, they are more familiar with the online system rather than conventional methods and most of them had joined the entrepreneurship program at least one in their university. This is also due to the pandemic situation which makes every single activity based on an online system in this new norm around the world. STEP has been one of the alternatives for the business individual to promote their product in this system.
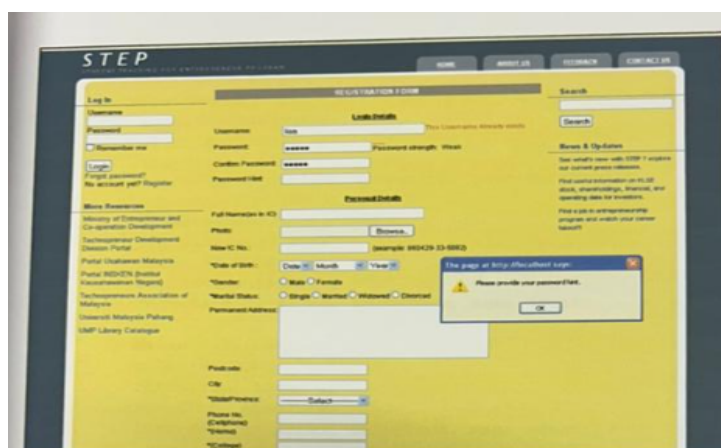

Figure 2. Registration Page in STEP

Table 1. Percentage of the students joined entrepreneurship program

Option	1 to 3 (Entrepreneurship program)	4 to 7 (Entrepreneurship program)
Frequency	70	30
Percentage	70	30

Conclusions
STEP is a web based application to track student information in order to help them advertise their own product and increase their business development through Entrepreneurship Program. Based on the survey, all of them agreed to use an online system in this crucial time with the pandemic situation. The hybrid of Evolutionary Prototyping and Reuse-oriented Development managed to create this system more user friendly and give the best result in tracing students who are involved in the entrepreneurship program. In the future, hopefully this system will help to intregrate and analyze all the business products that are useful to consumers to choose the best product for their daily life.

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