



**UTM**  
UNIVERSITI TEKNOLOGI MALAYSIA

School of Computing  
Faculty of Engineering

**SECD2523 – DATABASE**

**SEMESTER 1 2023/2024**

---

**P1 - SYSTEM PROPOSAL**

**NexScholar Event System**

**Group Name: *PCK***

**Members:**

- 1. Omar Mohammed Rezk Ebid Elashry – A22EC0026**
- 2. Hasan Hatem Hasan – A22EC0013**
- 3. Ahmed Amir – A22EC0007**
- 4. THANES A/L SIVAM – A22EC0284**
- 5. Zheng Shuoyu – A22EC4019**

# CONTENTS

---

1.	
<b>Introduction.....</b>	
<b>.....3</b>	
2. <b>Background</b>	
<b>Study.....</b>	
<b>.....3</b>	
3. <b>Problem</b>	
<b>Statement.....</b>	
<b>.....3</b>	
4. <b>Proposed</b>	
<b>Solutions.....</b>	
<b>.....4</b>	
4.1. <b>Feasibility</b>	
<b>Study.....</b>	<b>4</b>
5. <b>Proposed Project</b>	
<b>Objectives.....</b>	<b>5</b>
6. <b>Project</b>	
<b>Scope.....</b>	
<b>.....6</b>	
7. <b>Project</b>	
<b>Planning.....</b>	
<b>.....6</b>	
7.1. <b>Human</b>	
<b>Resource.....</b>	
<b>..6</b>	
7.2. <b>Work Breakdown Structure</b>	
<b>(WBS).....</b>	<b>6</b>

7.3. Gantt Chart.....	7
8. Requirement Analysis.....	7
8.1. Current business process.....	8
9. Transaction requirements.....	9
10. Benefit of Proposed System.....	9
11. Summary of Proposed System.....	10

# PROPOSED SYSTEM

---

## 1. Introduction

*Web platforms have evolved as critical tools in today's digital age for connecting people with common interests, allowing information sharing, and promoting a feeling of community. However, it is critical that these platforms grow in order to satisfy the changing needs of its consumers. This proposal focuses on resolving the issues and limitations of Nexscholar, a website primarily created for post-graduate students that also functions as a social media platform and expert networking hub. The goal of this proposal is to identify existing website flaws and present a detailed plan for improvement. We hope to convert this platform into a dynamic and vital resource for the post-graduate community by improving its functionality, usability, and overall user experience.*

## 2. Background Study

*The current system is an online platform meant to help post-graduate students in a variety of ways. It lets users establish profiles, connect with others, and exchange information as a social media platform, building a sense of community among its members. Furthermore, the system attempts to assist users in locating experts in their particular industries.*

## 3. Problem Statement

1. **Restrictions on Event Posting:** *The system only permits the administrator to post events. This restriction severely limits user participation and stops people from sharing their events.*
2. **Lacking Reservation System:** *There is currently no method for users to make reservations for events. The lack of a reservation system creates ambiguity about the number of attendees for a specific event.*
3. **Payment Integration:** *The system lacks an event payment feature. This presents a big challenge for fee-based events, as users cannot pay and register for events directly through the site.*

4. **Communication:** *The procedure of submitting events to the administrator is unclear, making it less user-friendly. Users require a faster way to provide event details, potentially through the platform itself.*

## 4. Proposed Solutions

1. User-friendly interface: When a user-friendly interface is made available it will be easier to use.
2. User Communication: One other proposed solution is to allow the organizers of the event to communicate with registered users using emails or a messaging path in the website itself.
3. Payment Integration: In case the event requires payment, there should be a gateway for payments to accept payments directly through the website. Payment methods may include PayPal, Credit Cards, TNG, GrabPay and others.
4. Reservation System: It will be able to make users sign up directly through the website and not redirect them to other websites which might cause a hassle for the users.
5. Event Information Fields: The organizers should have a form in order to able to fill fields required for the event such as event title, description, date and time, location, organizers, event website, and event cost.
6. Admin Notification: The admin should get a notification for every event request needed to be reviewed before placing it.

### 4.1 Feasibility Study

#### 4.1.1 Technical, Operational and Economical

1. A technical feasibility study is conducted to determine whether the project is technically feasible, meaning whether it can be successfully developed, implemented, and maintained using the available technology, resources, and expertise. In that case, Nexscholar can be improved in certain aspects such as the website's infrastructure. The website's interaction with students should be simple and not complicated. Other than that, security enhancements are also important in a scholarship platform like Nexscholar. For example data

encryption is an important element in security enhancements. Implementing encryption protocols, such as SSL/TLS, to secure data transmission between users' devices and the platform. Moreover, encrypting sensitive data at rest, including user profiles, academic records, and financial information is also important.

2. The primary goal of an operational feasibility study is to determine whether the project is viable in terms of its operational impact and compatibility with the organization's processes, resources, and objectives. Currently Nexscholar is a website primarily created for post-graduate students that also functions as a social media platform and expert networking hub. It operates with the collaboration of students, university and also a particular organization which wants to provide the scholarship to the students. This operational level can be improved in many levels such as alignment with organizational goals, legal and regulatory compliance, operational sustainability and many more. Other than that, on an operational level we can make this system to recommend more for the users. For example we can develop a recommendation engine that suggests scholarships based on a student's profile, academic history, and interests. We can also use machine learning algorithms to refine and improve recommendations over time.
3. Economical feasibility study assesses whether the proposed project is financially viable and can generate a satisfactory return on investment. It focuses on the economic aspects of the project, including costs, revenue, and financial sustainability. In Nexscholar the main economical feasibility study would be Cost-Benefit Analysis (CBA). Cost-Benefit Analysis (CBA) is a systematic process used to evaluate and compare the costs and benefits of a proposed project, policy, or investment decision. CBA for Nexscholar involves the cost for improvement for a better user interaction. For example there will be expenses when we collaborate with banks and financial management companies. Other than that, there will be maintenance cost for the website too. The profit of this website can be gain by partnership with companies that are providing the scholarships.

## **5. Proposed Project Objectives**

The main purpose of the Event section in the NexScholar is to provide a user-friendly experience for users so that they can access event details, register for events, and allow organizers to submit and manage events.

## 6. Project Scope

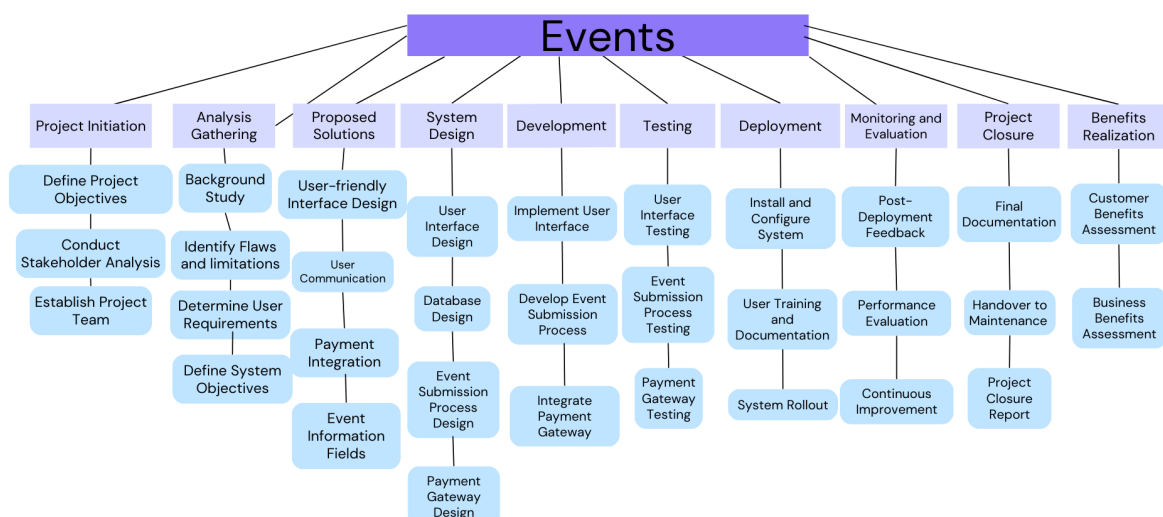
1. User interface and user experience improvements to help event registration and reservation.
2. Development of an event submission process to make it easier to approve or disapprove.
3. Integration of a payment gateway for events that require payment.
4. Establishment of a notification system to inform admins about new event submissions from organizers.

## 7. Project Planning

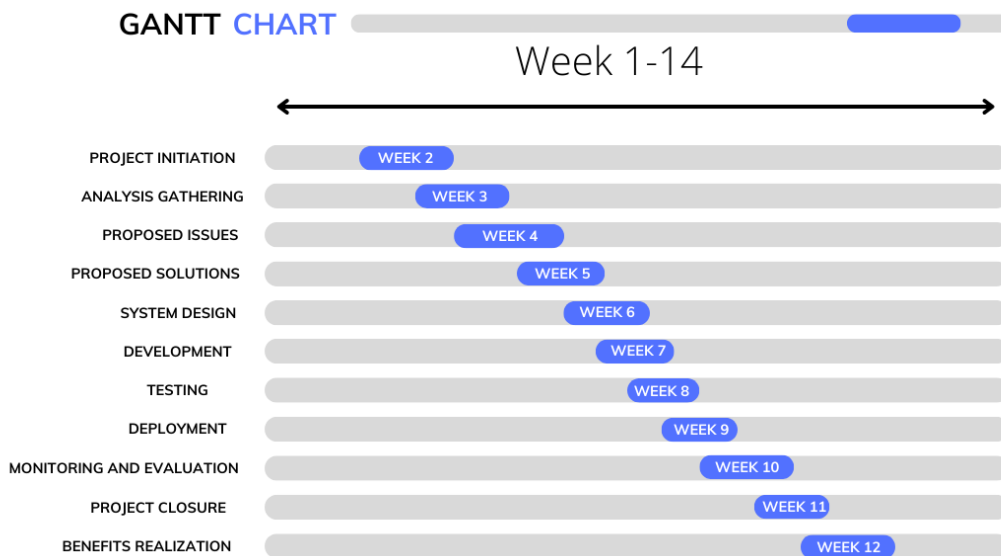
### 7.1 Human Resource

1. Omar Mohammed Rezk Ebid Elashry – Background research , identifying issues.
2. Hasan Hatem Hasan – Outlining objectives and identifying solutions.
3. Ahmed Amir – Project planning including Gantt chart , WBS etc..
4. THANES A/L SIVAM – Analysis and Transaction requirements.
5. Zheng Shuoyu – General Overview and Project Summary.

### 7.2 Work Breakdown Structure (WBS)



### 7.3 Gantt Chart



## 8. Requirement Analysis

### 1. Problem : Security and Encryption

The scholarship system collects and manages a vast amount of sensitive information about students, including personal details, academic records, and financial information. This information is not secured and encrypted in a proper way.

Requirement : Implement secure login mechanisms, such as two-factor authentication. Provide users with control over the visibility of their profiles and content.

### 2. Problem : Notification System

There is no notification system for this website where the users can miss important messages or important offers. As most of the users are students' without a notification system it will be hard for them to cope up with their busy schedule.

Requirement : A notification system that can notify the users at times where they need the information.



3. Problem : Currency Exchange

There is no currency exchange system when payments are made for a particular event. This will be a problem for international students. It can also prevent the development of this system on a global level.

Requirement : Build a system for currency exchange when payments are made to reach a global approach.

4. Problem : Training and Support

The system is large and has many options which can be a downside when it comes to user friendly. Users might get confused when registering events which can lead to misinterpretation and users can register the wrong thing.

Requirement : The system can provide the users with manuals and also tutorials on accessing the website which can be very helpful for the user.

## **8.1 Current business process**

The business process from the user point of view starts by logging in the website by entering the username , email address and the password. Then the Nexscholar website opens up its main front page. Next as the user wants to register a particular event they should select the Event and Conference section. In that section they will have two options which are the Event Calendar and the Event List. When the user chooses the event list, Nexscholar will show the list of events that have been registered and done by the user. Other than that it'll also display the latest events that are going on. Moreover the system also shows the event's details and users can get all the information from this option. Users can also leave additional comments on the particular chosen event and they can also add the event to their event calendar. Under event calendar other than date users can also have information about the location, organizers, event website and event cost.

## 9. Transaction requirements

The purpose of transaction requirement in the database project is to ensure the completeness and consistency of the data. Databases can be accurate by checking two forces which are integrity and consistency, thus achieving data consistency.

### Data entry:

#### Create Event:

Requirement: Allow organizer to add event with details like name of the event, description, time and date and if it is online or not.

#### Payment:

Requirement: Allow users to use pay by entering their payment method details then provide them with a valid ticket.

### Data Update/Delete:

#### Updating Event Info:

Requirement: The organizer should be able to edit event info at their will and make sure participants get alarmed.

#### Canceling Event:

Requirement: The organizer should be able to cancel an event and refund the participants if they paid.

### Data Queries:

**Being able to view the amount of visits on a certain event:** Queried data should be able count the amount of visits on a certain event to help make it trend more.

**Event Notification:** The user should be able to receive notifications regarding the event whether it is as a form or reminder or the event was updated or maybe even canceled.

## 10. Benefit of Proposed System

Customer benefits:

- The process of ordering customers will not be confusing, they can see the detailed description of the menu and whether it is available or out of stock. That way customers will not ask the restaurant about food details.
- Customers can get a special request to be added to the ordered menu when they are on the menu ordering page and it is optional if they want.
- Customers can know the delivery time of the order and the current location of the delivery guy so they do not have to worry anymore.

- After the ordering process is complete, customers can provide feedback along with a rating based on the satisfaction of the restaurant's menu and service.

Business benefits:

- The data from the customers are recorded neatly and guarantee its validation, so the seller will be easier to analyze the loyalty of the customers, business marketing, and promotion.
- Sellers can find the current sales status increasing or decreasing from customer feedback and ratings, if there is a decrease they can detect the causal factor, and if there is an increment they can maintain and develop it.
- The business can find out the stock of the menu that has been set to be able to arrange the next shopping schedule.

## **11. Summary of Proposed System**

This proposal is our project on the subject of Database. Started by attending a workshop that was accompanied by the system and database developers. Then plan the proposed project objectives and provide the project scope and system boundaries as an illustration of our thoughts. With this proposal, we aim to assist in developing a system that is used by stakeholder businesses in facing challenges during business activities and realizing the desired expectations in the future. As a suggestion, the system can be able to track all of the activities based on the requirements in running a business, making it easier to survive, expand, and avoid complex methods. With this system that we suggest also will give a good investment year by year.