



# IS480 Project Proposal

## ANG MO KIO-THYE HUA KWAN HOSPITAL – Learning and Development Portal

### PlusMinus

**Version Number: 2**  
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#### **Faculty Supervisor:**

- Paul Griffin

#### **Sponsor and/or Clients (if any):**

Organization: Ang Mo Kio - Thye Hua Kwan Hospital

Department: Human Resource and IT

- Cheryl Koh [cheryl\\_koh@amkh.org.sg](mailto:cheryl_koh@amkh.org.sg) - HR
- Edy Chandra [Edy\\_chandra@amkh.org.sg](mailto:Edy_chandra@amkh.org.sg) - IT

## Project Overview

### 1.1 Project Description:

This project focuses on developing an online portal which combines approval workflow routing and various e-Learn components for Ang Mo Kio - Thye Hua Kwan Hospital (AMKTHKH). This portal is developed specially to suit the needs of our client, selecting only certain functionalities that they require. Firstly, the portal aims to convert the existing manual paper-based training application and approval process to an interactive and customizable electronic-based process, allowing staffs to apply and approve training courses.

Secondly, this portal will allow AMKTHKH's staff to view available courses, download course materials, take quizzes to enable staff to take charge of their own learning progress. The project aims to reduce the processing time of the entire approval workflow process by minimally 50% and to ease routing confusion, making it a fuss-free approval process.

### 1.2 Motivation:

AMKTHKH currently adopts a paper-based application and approval process for training courses. This method is highly inefficient as the Human Resource department has to check each form manually. By automating the current paper-based process, the portal will be able to validate forms automatically and pass information between departments easily. The electronic-based process will help AMKTHKH's upper management to keep track of their training budget, allowing them to make proper funding decision wisely. In addition, this portal will also allow staff to apply, learn and track their progress in one single platform which provides consistency and accuracy.

Therefore, the overall objective of this online portal is to allow AMKTHKH to effectively manage their staff's training by implementing an efficient training application + approval process and provide an online platform for learning.

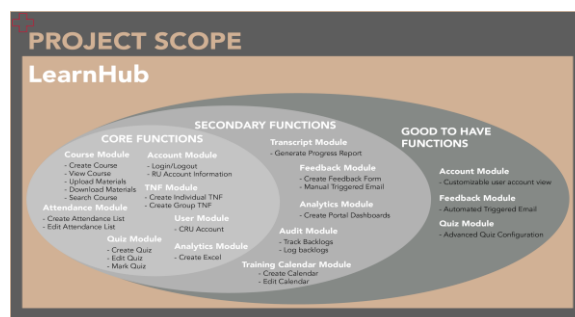
### 1.3 Stakeholders:

Sponsor	Initiator and Point of Contact: <b>Ms Cheryl Koh</b> , AMKTHKH Human Resource Department <b>Mr Edy Chandra</b> will also be working alongside us and Ms Cheryl Koh to assist in the technical aspects of the project.
User	The sponsor is just one of the many users that this portal will stand to benefit. This portal is projected to be implemented and used by all of AMKTHKH's staff, including nurses and doctors.

### 1.4 Deliverables:

The outcome of this project would be to deliver a working portal titled 'LearnHub', with a self-created database for the client. The client has agreed to let us use our self-created database which they will integrate internally upon handover. Once LearnHub is fully developed, it will be handed over to the client and hosted in the server that they have provided us. The deliverables will allow the sponsor organisation to fully convert their manual training application and approval process to an electronic format.

### 1.5 Scope:



### TNF

The TNF consists of the points in 'TNF Module' in the above diagram, where the team aims to automate the manual training application and approval process. The approval workflow is customizable by the user in terms of choosing approvers, number of approvals and criteria. This aspect of the project seems to be the

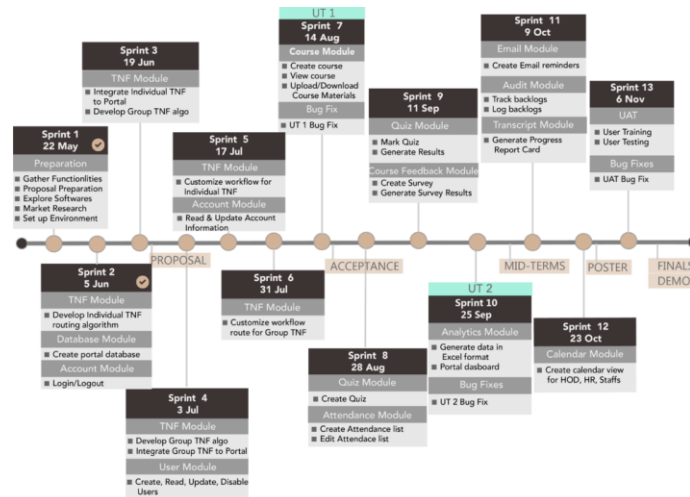
most interesting out of all the required functionalities of the project and might prove to be a unique selling point of LearnHub.

**e-Learn Portal**

The e-learn portal includes functionalities such as uploading/downloading of course materials, setting/attempting of quizzes, providing feedback for the attended training course, and tracking their personal progress. For staff with managerial role, functionalities such as analytics, audit, attendance tracking, account management are included since they are very useful for their management purposes.

**Project Plan**

o **Timeline:**



o **Risks:**

S/N	Risk Type	Risk Title	Likelihood	Impact	Category	Mitigation Plan	Escalate into issue?
1	Technical Risk	Team is unfamiliar with project technologies such as ASP.NET and have limited experience in implementing certain functionalities	High	High	Red	Consult professors and look for alternatives	Yes
2	Project Management	Project delayed due to underestimated/unclear functionalities	High	Medium	Dark Orange	Work with sponsors closely to refine functionality specs	No
3	Client Management	Sponsors might change requirements	High	High	Red	Log it under change request and evaluate the importance	Yes

o **Resource and reference:**

**Resources needed:**

1. Training of the usage of new softwares such as .NET
2. Client's time to update us frequently with any change of functionalities
3. Client's server to host our website

**Technology using:**

- **Language:** C#, HTML, CSS, JS, jQuery
- **Framework:** ASP.NET MVC Framework, Bootstrap
- **Development:** Microsoft Visual Studio, Microsoft SQL Server Management Studio
- **Versioning & Repository:** Google Drive, GitHub
- **Communication:** WhatsApp, Telegram, Email
- **Project Management:** Excel, KanbanFlow