

## DEVELOPMENT OF E-HISTORY APPLICATION FOR STPM STUDENTS

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### ABSTRACT

*One kind of formal education that makes use of electronic tools like computers and mobile phones is known as e-learning approach. History subject is one of the most difficult subject and it is still taught in classrooms using the traditional method, which involves studying textbooks and modules. This study addressed several issue statements, including the use of official vocabulary and complex terminology, classroom boredom, and a shortage of instructional resources, to achieve its goal. This E-History Application was developed specifically for Form 6 students to solve those problems. This E-History Application can also provide history teachers with professional development opportunities that keep them up to date on the latest research in the field and cutting-edge teaching strategies. The main aim of this application is to develop an extensive and easily navigable learning platform focused on history topics. Using this application in classes will provide a flexible and dynamic way to teach, meeting the needs of different kinds of students and raising the standard of education overall. This E -history application is being developed with the use of the ADDIE approach. A Gantt chart was utilized for this project to forecast the estimated time and ensure that the deadline was met.*

**Keywords:** e-learning, ADDIE model, history subject, application

### Introduction

E-learning has grown in Malaysia in part due to the exceptional COVID-19 pandemic epidemic. Online learning and education are becoming necessities, as noted by Professor Dr. Abdul Karim Alias, Director of the University Sains Malaysia (USM) Centre for Development of Academic Excellence (CDAE). Because of this, many students have already participated in e-learning during their two years of COVID-19 education. Whether in elementary or high school, the majority of kids already have devices that they use regularly for daily tasks. They are spending more time playing with their gadgets than they are playing outside with friends.

Electronic learning, also known as e-learning, is a teaching approach that simplifies learning and information acquisition by utilising digital resources and technology advancements. All educational endeavours that leverage electronic technology to support them are referred to as e-learning, and they

can be used both in traditional classroom settings and online (Coman et al., 2020; Rahayu & Wirza, 2020). Through digital platforms that are regularly made available online, it allows students to engage in interesting tasks and access instructional resources. There is interaction between students, teachers, and content in e-learning. Teachers and students interact in a way that promotes learning throughout this process (Hussaeni et al., 2020). Educators' capacity for managing the learning process will determine how effective the lessons are. When the goals of the learning are accomplished, learning is considered effective. Teachers must be able to select the appropriate media, techniques, and strategies based on the content to be taught in order for learning to be effective.

Personalised learning is possible with e-learning. Students can use their smartphones to work and learn at their own pace. Learning is expected to grow more successful through the use of e-learning, improving the traditional learning method and providing a way to maximise learning outcomes (Najuah, Ricu Sidik, 2021).

There are findings show that the design and execution of e-learning as a solution for history classes falls into the good category since it can support the study of history in a wider range of contexts, such as through the utilisation of local and virtual museums (Mahadin et al., 2022).

STPM students face difficulties because the materials contain formal language and complicated vocabulary. The learner has trouble picturing historical occurrences. Most schools continue to follow the outdated methodology, and pupils mainly learn about the past in order to pass exams. They could find it more difficult to comprehend what transpired as a result. When reading historical books that are primarily constituted of text, students could have trouble visualising the people and events being discussed unless visual aids like maps, diagrams, or photographs are used. As a result, individuals could have trouble visualising the historical events they have learned. Traditional history textbooks with their voluminous text and dearth of visual aids could make students bored. Moreover, it is often a challenge for educators allocated to Form Six to adequately prepare their material before to instruction.

This E-History application, which was made especially for STPM History subject focus on topic sem 1. It's included a test and exercises to make history classes more engaging and enjoyable. Four topics are covered in the history form 6 semester 1 syllabus: nationalism and the creation of the nation state; government and administration; progress and development; and society. The purpose of this programme is to develop an extensive and easily navigable learning platform focused on this topic. This engages kids, helps them become familiar with historical questions, and makes it easier for them to respond to similar inquiries down the road. It is advantageous for teachers as well because they can assign the question to their pupils as a homework assignment or extra assignment. It can also broaden

students' knowledge by helping them comprehend the subject and provide the appropriate response in addition to helping them respond to questions. In this application development, multimedia element also included to make sure the application are interactive and enjoyable while using. The figure 1 below shows the diagram for elements of multimedia.

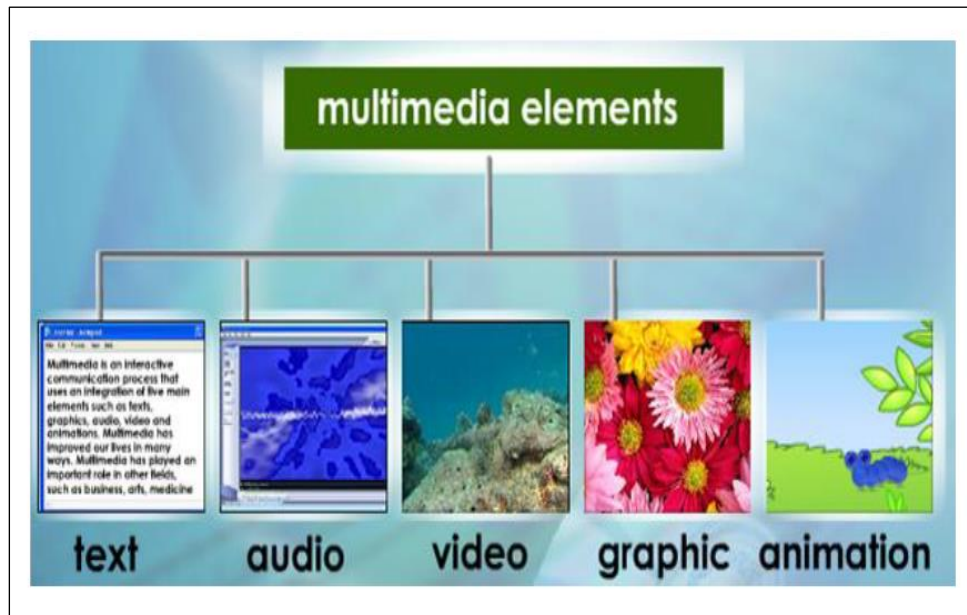


Figure 1: Diagram elements of Multimedia

## Methodology

The development of e-history application for STPM student (Sem 1) is based on ADDIE model which contain Analyses, Design, Development, Implementation and Evaluation. This model was applied to define the progress needed to complete the project by modifying the process in the ADDIE model. These five steps showed dynamic, customizable training in the development of powerful training and performance support systems. Though it was developed in the 1970s, the ADDIE training paradigm is currently the most widely utilized model for instructional design due to its extraordinary efficacy and simplicity (Andrew Downes,2019). The abbreviation ADDIE stands for Analysis, Develop, Implement, and Evaluate, as illustrated in figure 2. There are five stages in the learning and growth process. By supporting the methodical identification of the learning need and guaranteeing that all learning activities meet the objectives, ADDIE offers an integrated approach to teaching.



Figure 2: ADDIE Model

A Gantt chart was a tool for project management that could have been used for any kind of project, but it was especially useful for handling complicated activities. After translating project management tasks and schedules, a horizontal bar chart is produced that shows the starting and ending dates, roles, due dates, and % of daily effort. For this project, a Gantt chart was also used since it helped to make sure that tasks were finished on schedule. The data on the Gantt chart was connected with the ADDIE model. A Gantt chart used for project planning is shown in Figure 3.

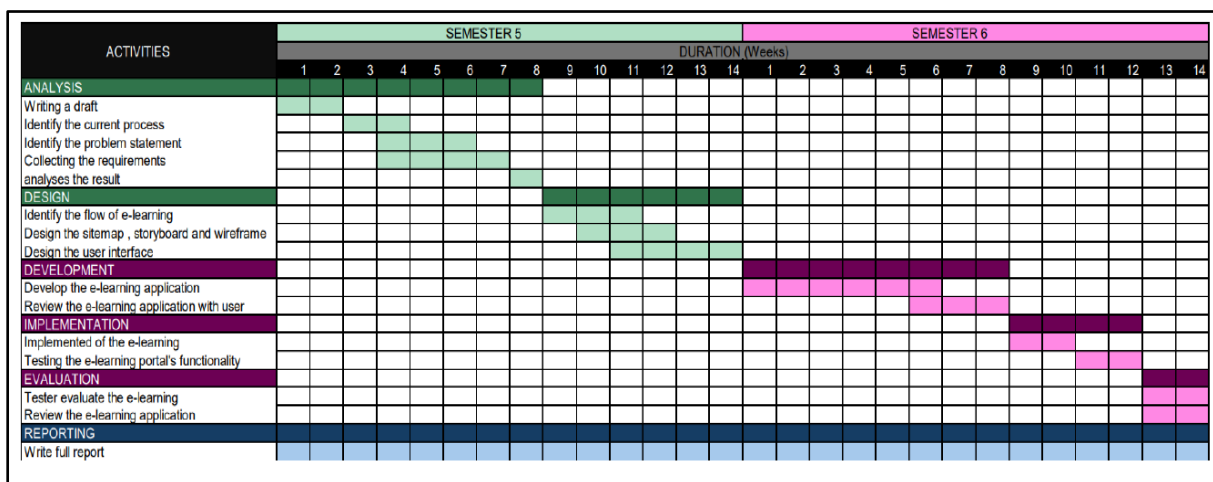


Figure 3: Gantt chart for E-History Development

### Project Development

To accomplish the primary goal of the project, more preliminary study and necessary documentation were included. The project framework for this e-learning application development based on ADDIE Model is discussed in Table 1 below.

Table 1: Framework for E-History Applications

Phases	Activities
Analysis	Identify the current business and problem statement by conducting interview to form 6 student and history teacher.
Design	Design sitemap. Design storyboard. Design wireframe.
Development	Develop interactive education e-learning application consisting of multimedia elements.
Implementation	e-history application for STPM student (Sem 1) publishin play store. e-history application functionality is tested
Evaluation	Create a suitable questionnaire. Test the e-history application usability

## Conclusions

E-History Application as an application developed to help STPM students in their study. This e-learning application utilizes the adapted ADDIE model as its approach, which consists of five phases: analysis, design, development, implementation, and evaluation. Beside this, it also include all of the multimedia elements to make sure the application keeps engage with interactive and interesting to help the student in their study.

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