

**COMPUTER HARDWARE THROUGH GAME  
BASED LEARNING (IT-CITY GAME)**

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JUDUL: COMPUTER HARDWARE THROUGH GAME BASED LEARNING

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COMPUTER HARDWARE THROUGH GAME  
BASED LEARNING

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This report is submitted in partial fulfillment of the requirements for the  
Bachelor of Computer Science (Media Interactive).


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2011

## DECLARATION

I hereby declare that this project report entitled  
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BASED LEARNING**

is written by me and is my own effort and that no part has been plagiarized without  
citations.

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## DEDICATION

I dedicate special thanks to my parents who giving me support and motivation throughout my PSM. This dedication are also to my PSM supervisor, Encik Ahmad Naim B. Che Pee @ Che Hanapi for the consultation, advices, comments and support just to make sure that I can finish this PSM successfully. I also want to thanks to my all my friends that always are by my side as I working on this project.

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## ABSTRACT

Computer hardware through game based learning is a multimedia platform as a courseware that help student to learn about a basic computer hardware. Nowadays, courseware about computer is still not wide and not familiar in education. In this game will create something that student can get a benefits and knowledge for their education in technology. This courseware is design for fun learning like have a game that user can feel enjoy and fun when learn in this courseware. This courseware is also have a simple note that student can read, understand and practise their skill when they need to assembly the computer in tutorial. I hope this courseware can improve in the future for education about science computer.

## ABSTRAK

Pembelajaran perkakasan komputer melalui permainan komputer adalah suatu medium multimedia yang membantu pelajar untuk mempelajari mengenai perkakasan komputer dengan lebih terperinci. Pada masa ini, pembelajaran secara multimedia masih berkurang dan tidak berkembang lagi. Di dalam projek ini cuba untuk mencipta suatu teknik pembelajaran melalui medium multimedia yang boleh memberi manfaat dan pengetahuan mengenai kepentingan pendidikan teknologi. Aplikasi ini dicipta dengan terdapatnya elemen permainan komputer untuk memberikan hiburan dan kepuasan kepada pelajar semasa menggunakan aplikasi ini. Aplikasi ini juga menyediakan kemudahan seperti nota-nota penerangan mengenai perkakasan komputer yang membolehkan pelajar membaca, memahami dan mempraktiskan kebolehan mereka untuk memasang komputer semasa melakukan simulasi pemasangan komputer yang disediakan. Saya berharap aplikasi ini dapat dipertingkatkan lagi kebolehannya untuk kegunaan masa depan di dalam sektor pendidikan.



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## **CHAPTER I**

### **INTRODUCTION**

#### **1.1 Project Background**

Nowadays, computer it is become important thing that all people use it to do some daily works like programming, designing, networking and others work that use the computer. So, in the same time we must know all about the computer specification, application on the computer and also all the computer hardware. This project it can make people can understand all the function of computer hardware and know how to assembly it.

This courseware how to assembly the PC is create to make all people especially student to understand and can learning about the computer hardware. Games are includes in this courseware to make student feel fun and easy to understand all about the input that give from this courseware. So, my project is a like education for people that want to learn how to assembly the PC and know the function of computer hardware

## 1.2 Problem Statements

The problem statement for my project is which one that lack of knowledge of people about computer. They just know how to use it, but their didn't know how the process of computer is operate and what the hardware are use on their computer.

Our computer is a normal thing that sometimes needs a service and some attention to make the machine is running perfectly. So, we must know that how important of computer hardware to us. If any problem that happen to our computer, that easy to us how to resolve it when know all part of computer hardware.

Nowadays, still not have many tutorial or courseware that teach us how to assembly the computer. With this interactive courseware it can make the interest of people to learn more about computer. Besides that, cost when we buy an already one complete desktop computer from any shop it is little bit expensive compare we buy each one of every part component computer hardware and assembly it our self. We can make a choice of every hardware like graphic card, processor, hard disk, motherboard, casing, and others hardware for our PC. After we know how to assembly computer, it can save the cost.

### 1.3 Objective

- To develop a courseware that can increase of knowledge to student and people about computer.
- To awareness the people about development high technology of computer right now.
- To make an interesting and fun learning for all user to learn about assembly computer.
- Increase of multimedia product in our market.

### 1.4 Scope

- Scope for this project it is for student that study and take of subject about computer hardware.
- This courseware have a tutorial and training to student learn how to assembly the computer and know all the function of hardware.
- Include a game that user must play the game and answer the question.
- Have a note and information to user read and understanding about the computer hardware before their do the assembly PC and play the game.
- This courseware just focus about the computer hardware because we want user like student can understand properly and not confuse about computer hardware and software.

## 1.5 Project Significance

This courseware about assembly the computer can give benefits to students that take a computer hardware subject to know more about computer hardware and all the function. Before enter the class they can learn about computer with this courseware and know little bit how to assembly the computer and the hardware function.

Besides that, other people can also learn about the computer hardware and how to assembly it through with this courseware. It can make people know how important to know all the computer functions. When this project are successfully developed, it is can make industrial of multimedia can develop more others of courseware or animation in our country. When student use this courseware, it can make their really interesting to know more how to develop any flash product and their want to learn more about animation and multimedia.

## 1.6 Conclusion

For this project, all the combination of tutorial and information that given in this courseware hope can help the student and others to understand how to assembly the computer and the function each of hardware like graphic card, motherboard, processor, RAM, and etc. Nowadays, the technology of computer is more increasingly and many product that produce by the entire brand are high technology and as a science computer student must know and follow this development. It is important for future when their work soon.

For this chapter, it's a like planning before to proceed for the create a storyline of the project and think an any ideas for this courseware. All the main component that

must be take attention is like objective, problem statement, project background, and scope of this project. For the next activities, literature review and project methodology to discuss about the domain, existing system, comparism of existing system and project requirement.

## CHAPTER II

### LITERATURE REVIEW AND PROJECT METHODOLOGY

#### 2.1 Introduction

Courseware in the market today has many choices to user or customers make a right choice for what they want to learn from the interactive platform. When have a many product produce to give a satisfaction to user, it's can make all the product give best effort for their service and complete application for their system or courseware. For this project, courseware it's a main function to give the effective learning and tutorial about how to learn computer hardware, and how to assembly the computer. This product has more focus to user like student that take a subject about computer hardware or organization.

## 2.2 Domain

For this project, the main domain that has created on this courseware is about learning with a fun quiz game that can attract user to play and understand all the component computer hardware. Nowadays, game is a popular platform to all people especially student has play it for their fun and entertainment to release a tension. With games we can take the advantages from it to give an education through it to make user enjoy and can learn something when their play that games. So, it is just not for fun only but for their understanding in education too.

Education is main objective that I want to convey for student on my courseware. I try to create something new and interesting that people can really understand what their must do on my courseware and they can use the courseware correctly when they connect with their course subject on University or school. Research of my project is determined that children nowadays are bored and tired of traditional methods of learning. Games is suitable and the best domain that create for our education and is a interactive platform.

Computer hardware is the important thing that all people must know it little bit especially a student that in an IT course. Computer hardware consists of the different components of a computer including the CPU or the Central Processing Unit, mouse, keyboard, monitor, hard disk, RAM or memory, drives such as the DVD, CD, optical, tape and so forth. All these components are essential for the proper functioning of a personal computer.