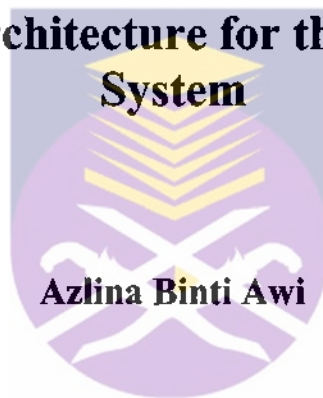


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**Universiti Teknologi MARA**

**Customization on Software  
Documentation Standard for 3-Tier  
Software Architecture for the Web-based  
System**



Thesis submitted in fulfillment of the requirements for  
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## ABSTRACT

Software documentation standard is designed to support the documentation of software system development. One type of software documentation standard is the Software Requirement Specification (SRS) that provide as a basis in documenting software requirements during the requirement analysis phase of the software development life cycle. Complete SRS gives a lot of benefits for the developers in developing the software product such as reduce on-going costs, complete specification of the system, avoid later problem during the other development phases and other problems that can cause the big problem to occur and the most important is to avoid the software project to be failed. Three layers that contain in the 3-tier architecture are Presentation Layer, Business Layer and Data Layer that connected directly with the database. The separation of different layers with its specific role and function causes the 3-tier software architecture is the perfect choice to be implemented with the web-based system. Develop a 3-tier web-based system also required the preparation of a complete and detail explanation of the functionality and non-functionality of the 3-tier web-based system in the SRS. There is no specific standard of SRS that specific for the 3-tier web-based system. The main aim of the research is to come out with the SRS standard for 3-tier software architecture for the web-based system. Methodologies used in this research are observation and theory building. From the findings, it can be summarize that SRS plays an important role in the software development and 3-tier web-based system is a perfect choice in developing a web-based system. SRS documentation for the 3-tier web-based system can serve as a guideline to document the requirements in a specific way.

# CHAPTER 1

## INTRODUCTION

This chapter provides the Research Background, Problem, Objectives, Significance, Approach and Methodology, Limitations and Overview of the research project.

### 1.1 Research Background

Software documentation standard is designed to support the documentation of the software developed for a big or small project. The main reason for the standard is to provide a guideline or framework for the developer to record the information needed for them in the development of the software and also for the maintenance of the software itself.

The Institute of Electrical and Electronics Engineers (IEEE), Military department (MIL), National Aeronautics and Space Administration (NASA) and other institutions have developed their own standard to be followed in order to produce software system. These standards already followed as a guideline by all developers around the world to develop their own software product. The standards are complete and basically developers only have to follow the guideline and add or remove any items or information that they think suitable for their system.