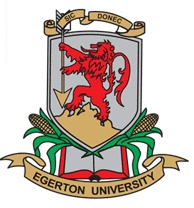
**EGERTON UNIVERSITY**



**SYSTEM DESIGN**

**DOCUMENT**

**FOR**

**EGERTON UNIVERSITY TRANSPORT**

**MANAGEMENT SYSTEM**

**PREPARED BY: PAUL CYRIL OYUNGU**

**REG NO: S13/21403/14**

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**PROJECT COORDINATOR: DR. WILFRED GIKARU**

**DATE: 18/4/2018**

**VERSION 1.0**

***OVERVIEW***

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**1 INTRODUCTION**

* 1. **Purpose and Scope**

This software design document describes the architecture and system design of Egerton University Transport Management System(EUTMS)

This document contains a complete description of the design and architecture of the EUTMS. The basic architecture is a web based application that users will access the system through the web. The description of the architecture and design will mainly be on the:

* Login and registration process
* Booking process
* Database architecture
* Inventory, vehicle and driver management process
  1. **Project Executive Summary**
     1. **System Overview**

EUTMS is responsible for managing most if not all activities done by the transport department of the university. Departments will make booking which will be viewed by the administration in the transport department and can be accepted or denied. Drivers, vehicles and inventory information will also be entered into the system and stored in a database and a report of them generated by the system. There will be schedule that will be generated by the system of confirmed or accepted bookings

For this to be done by the system, the system architecture below will be used in the different modules such as the login and registration module

Browser

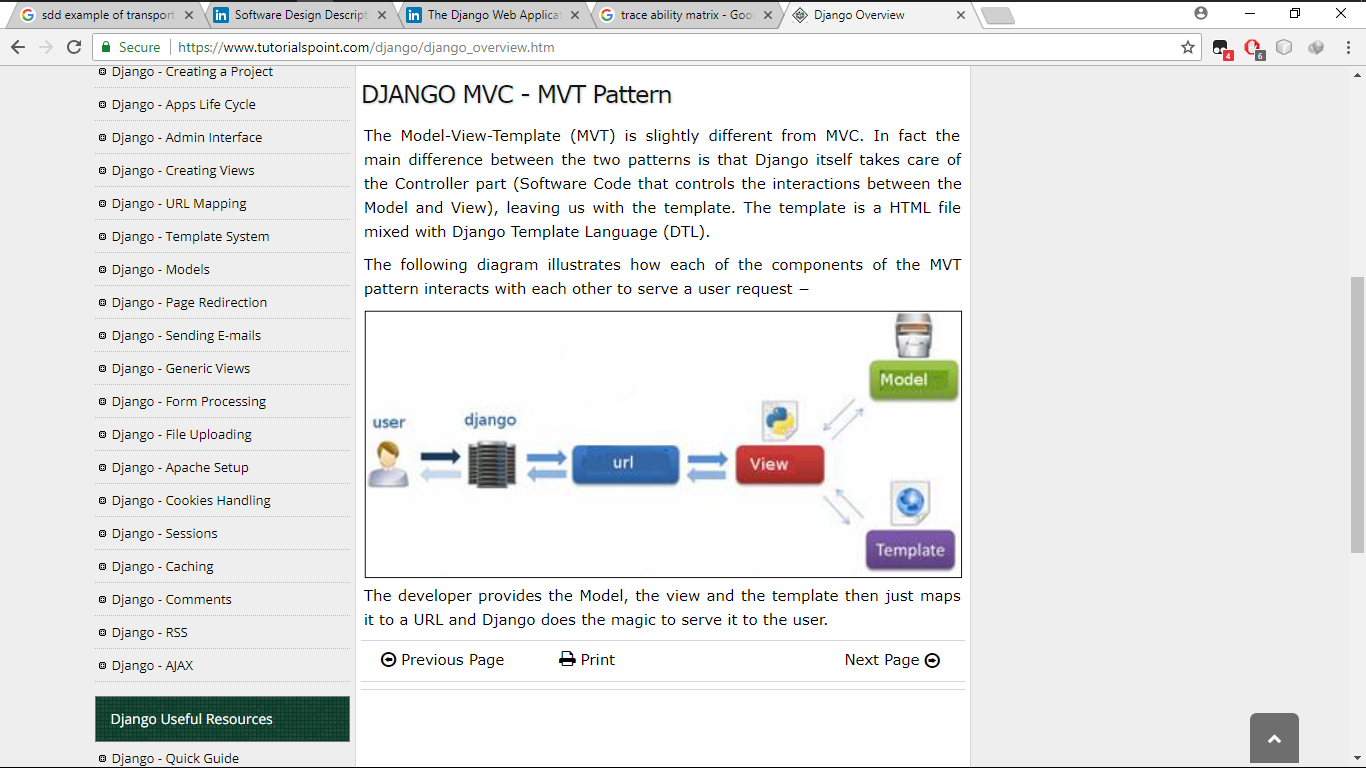
URL dispacher

Template

Views

Models

Database



* + 1. **Design Constraints**

There are several design constraints and limitations that come up when coming up with the design such us:

* Flexibility – the design has to be able to deal with the changes in a module that might arise. Coming up with a design that can be easy to deal with errors in a module
* Acceptability - an assumption had to be made on the visual design being liked or not. Also the flow of activities in the system had to be assumed that it would be liked by the user
* Integration – the design of the system integrating with other external systems was a problem since it would affect the system overall working
  + 1. **Future Contingencies**

Here are some of the likely circumstance that might lead to changes in the system plan:

* Requirements – there might be changes in requirements where features might need to be added or removed in the system depending on the departments needed I that particular time
  1. **Document Organization**

The current document is organized as follows:

* System architecture – this presents the system architecture of the EUTMS project including its subsystems by viewing the system from various perspectives such as the hardware architecture, software architecture and the internal communication architecture
* File and database design – this presents the system’s file and database organization and design. Gives the full and final design of the system’s database management system files including non-database management system files
* Human machine interface – this presents the design of system’s and subsystem’s inputs and outputs related to the users in details
* Detailed design – this presents information on hardware design, software design, and internal communication design that will be integrated together into the system
* External interfaces – presents information on the systems that are not within the scope of the EUTMS
* System integrity controls – presents information on the security and level of access to some information on the system
  1. **Points of Contact**
  2. **Project References**

SDD sys\_design\_doc.pdf by Dr. Wilfred Gikaru

* 1. **Glossary**

EUTMS- Egerton University Transport Management System

SDD – System Design Document

Dr. - Doctor

1. **SYSTEM ARCHITECTURE**
   1. **System Hardware Architecture**
   2. **System Software Architecture**
   3. **Internal Communications Architecture**
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