SYSTEM DESIGN DOCUMENT[1]

# Introduction

Previously in RAD document, project’s application domain and system analysis model were presented.

SDD document reports the transformation of the analysis model to system design model. SDD documents contains solution domain which is proposed and specified, design goals, subsystem decomposition, strategies and the definitions of subsystems and interfaces. Mainly, SDD portrays a virtual system that includes all of the specifications and requirements in RAD, and will create a service in boundaries between subsystems and interfaces.

## Purpose of the System

The purpose of the system is providing an efficient platform for users, which are customers, admin, managers, guest. For customers and guest, the main functionality that aimed is to search convenient trips to the places that want to travel and buy their tickets easily. For admin and managers, the main functionality that aimed is to editing the backup information or settings quickly, correctly and with ease. Further details can be found in RAD Document.

## Design Goals

TrustBus android app is a mobile application which users can buy online ticket using their credit card. Customers and guests can use the system for searching the appropriate trips and buy the tickets. Admin and managers can use the system for editing some backup information such as changing a trip’s departure hour. Therefore, this system should provide certain constraints, functional and non-functional requirements. For example, the customers which use TrustBus application should be able to see their tickets which they bought, the managers should be able to delete a trip.

Some of the important requirements and constraints are:

**Functional Requirements:**

-The system can never down, also at payment can never stop or cause error.

-The system should give gift ticket when 10 ticket bought from one customer.

-Guests can list trips without any login and can buy ticket with few information.

**Non-Functional Requirements:**

- The system must be running %100 of the time when buying and also when listing trips. The system can never crash.

- The system must allow more than 1000 parallel user. 1000 user must be able to use the system at same time. System must return response immediately.

- The system must be changeable and easily to maintenance.

**Constraints:**

-The implementation language is Java.

-The project is mobile-based.(Android)

## Definitions, Acronyms, and Abbreviations

SDD - System Design Document  
 RAD - Requirement Analysis Document

## References

RAD is taken as a reference.

Kamil Koç and Metro Ulaşım mobile applications are taken as references on this project.