### 4.1. Introduction

**4.1.1. Overview**

This document is the system design of ASTU football cup management system. It includes design goal, System architectures and proposed system design.

### 4.1.2. Purpose of the system

The purpose of the System Design process is to provide sufficient detailed data and information about the system and its system elements to enable the implementation consistent with architectural entities as defined in models and views of the system architecture.

### 4.1.3 Design goal

### The design goals are determined mainly based on the nonfunctional requirements.

Design goals describe the important system qualities.

* Performance
* Dependability
* Maintenance
* End user

**Performance**

**Response time:** we use simple algorithm with low running and compiling time so that the response time will be less.

**Throughput:**

**Dependability**

**Robustness:** our system let users to interact mostly by providing choices of inputs through check boxes, drop down which makes the system able to survive invalid user input.

**Availability:** the system is available anywhere with internet connection.

**Maintainability**

**Extensibility:** we try to decompose into distinct subsystems as much as possible that they can function independently this makes the system open to accept new functionalities.

**Modifiability:** as we mentioned above subsystems are loosely coupled so that we can change functionalities without affecting the remaining functionalities of the system.

**Readability:** we can easily understand the system by reading the code because its methods are clear and commented well.

**End User Criteria**

**Usability:** most of the functions are easy to use because they are not complicated and they easily understandable, users get them by using few numbers of buttons. Anyone can use it by following the simple system each step is clear and the steps themselves gives hint how to proceed to the next action.