Software Engineering Final Project Fall 2019

CPS 5301-02/4301-01

Technical Design Document

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# Introduction

This is the final project for Software Engineering Class and it will include development of the system that will use IEX API to retrieve, store data and do full reporting on it based on requirements that will be presented in this document. The system shall be able to retrieve data, make sure the consistency of data is complete, perform daily updates of certain parts of the system and report and present the scrapped data in a way that’s easily readable by humans.

This design document presents the designs used or intended to be used in implementing the project. The designs described, follow the requirements specified in the Software Requirements Specifications document prepared for the project.

## Purpose

##### The purpose of this document is to provide complete documentation regarding the process of developing the required system using agile software development methodology. It will contain both quick overview of the system as well as full and detailed descriptions of every component within it.

##### Primarily, the document is written for members of Team 1 who will use the written specification and provided design to develop required system. This will be the guideline for developers in the process of implementing the project.

## Scope

##### This document will provide detailed description of the software architecture of the final project’s system. The system itself will consist of various modules that will be developed independently but will be integrated into one big system in the end. Besides detailed description of these modules, this document will also describe data models of the system and provide a couple of class, state and system architecture diagrams within it.

## Overview

##### Chapter 1 represents the introduction of the document and provides short description of the project.

##### Chapter 2 will provide system overview with special focus on the environment where the system will be developed and run.

##### Chapter 3 provides the context in which the system runs and describes the external services that system use in communication and/or retrieval of data.

##### Chapter 4 goes into details of database design and dictionary

##### Chapter 5 describes into details components that have to be developed.

##### Chapter 6 describes the organization of work into sprints

# System Overview

## System Characteristics

## System Architecture

## Infrastructure Services

# System Context

# DATA DESIGN

## DATA DESCRIPTION

## DATA DICTIONARY

# Component Description

# SOFTWARE DEVELOPMENT CYCLES