**1.1 Document Purpose**

The purpose of this document is to provide a detailed and complete specification of precision medicine project. The project builds a dynamic website based on a database. The document will describe the construction of web service and database.

**1.2 Product Scope**

The project is an independent web application aimed toward users, such as doctors. These users will utilize the product to upload patients’ single nucleotide polymorphisms (SNP) data then search for medication suggestions. The project will store the results for every user who uploads data and matches drugs.

The major problem the application will address is matching drugs with individual. Currently, doctors prescribe drugs based more on symptoms and rarely on individual genome. This makes it difficult to prescribe based on individual genetic variants such as SNPs. The purpose of this application is to provide a list of drugs that match the individual’s SNP.

**1.3 Intended Audience and Document Overview**

This document is intended for DST2 group 2, as well as faculty, students, and teaching assistants associated with ZJE DST2 course.

Every member of the intended audience may be interested in a certain section. Those interested in the capabilities of the application should read part 2 (the overall description) to learn more about what the application can do.Those interested in the inner workings of software should read section 3 (specific requirements).Finally, readers interested in the development process should read through the entire document.

**1.4 Definitions, Acronyms and Abbreviations**

API – Application Programming Interface

CPU – Central Processing Unit

CS – Computer Science

JRE – Java Runtime Environment

GUI – Graphical User Interface

Gb – Gigabit

NFS – Network File System

RAM – Random Access Memory

SDK – Software Development Kit

SRS – Software Requirements Specifications

VC – Virtual Center

VM – Virtual Machine

**1.5 References and Acknowledgments**