



UNIVERSITY OF PISA
School of Engineering

LARGE SCALE AND MULTI-STRUCTURED DATABASES

STOCKSIM: STOCK PORTFOLIO SIMULATOR

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Part I

Documentation

Chapter 1

Introduction

StockSim is a Java application which allows users to simulate stock portfolios. It uses statistical models built from U.S. stock market stocks and ETFs historical data day by day, starting from YEAR.

Chapter 2

Actors and requirements

Blablabla.

2.1 Actors

Something about requirements in general.

2.2 Requirements

2.2.1 Functional requirements

Something about functional requirements.

2.2.2 Non-functional requirements

Something about non-functional requirements.

Chapter 3

Database

Something in general about the dataset and then about the choice of the DB architectures we choose (e.g. "We decided to use a documentDB because blablabla and a column DB because financial analytics on these volumes of data are performed

3.1 Dataset

3.1.1 Yahoo! Finance

3.1.2 NasdaqTrader

3.2 MongoDB

3.3 Cassandra

Chapter 4

UML diagrams

Blablabla.

4.1 Use Case diagram

Something about functional requirements.

4.2 Class diagram

Something about functional requirements.

Chapter 5

Software architecture

Part II

User manual

Chapter 6

Something about how to launch the client from command line

6.1 Sign up

Blablabla.

6.2 Login and logout

Blablabla.

6.3 Create a portfolio

Blablabla.

6.4 Other functionalities blabla

Blablabla.