Software Requirements Specification

for

<Project>

Version <X.X>

Prepared by

Group Name: <*place your group name here*>

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*<In this SRS template of the Java Institute for Advanced Technology, you will find text enclosed by “<>” symbols. This particular text has been presented herein in order to guide you through the template and specify explanations regarding the different sections in this document.*

# Introduction

*<Provide a brief introduction to the project and this should be accompanied by a brief overview of the content the reader will find in this section.>*

## Document Purpose

<Clearly identify the product whose software requirements are specified in this particular STS document. Furthermore, describe the scope of the product, and this is highly essential if the SRS deals only with a single part of the system.

Write a few paragraphs describing the purpose of this document as explained above.>

## Product Scope

<Provide a short description of the software being specified and its purpose, including relevant benefits, objectives, and goals.

A few paragraphs describing the scope of the software. Make sure to describe the benefits associated with the software.>

## Definitions, Acronyms and Abbreviations

<Define all the terms necessary to completely and effectively comprehend and interpret the SRS. These terms largely includes acronyms as well as abbreviations. If desired, a separate glossary that spans multiple projects or the entire organisation or a brief list of terms specific to a single project in a single SRS can be provided here.

## References and Acknowledgments

<Properly specify any other books, documents, or websites to which this SRS refers. These may include a vision document, scope document, standards, user interface style guides, contracts, system requirements specifications, or use case documents.

# Overall Description

## Software Perspective

<Describe the background or context as well as the origin of the software that is dealt with this SRS. In case the SRS defines a segment of a larger system, relate the requirements of the larger system to the functionality of this particular software and identify interfaces between the two. Furthermore, include a diagram that depicts the major components of the overall system, interconnections, and external interfaces. Note that it is vital to be creative and provide comprehensive information.

Present a brief description of the perspective of the product. Furthermore, provide a general diagram that will depict how the product interacts with its intended environment and the context in which it is being used.>

## Users and Characteristics

<Identify the various users that you anticipate will use this Software. Users may be differentiated based on frequency of use, subset of Software functions used, technical expertise, security or privilege levels, educational level, or experience.>

## Operating Environment <Optional>

<Describe the environment in which the software will operate, and this should include the hardware platform, operating system (including versions), and any other software required. A diagram that illustrates the primary components of the entire system, subsystem interconnections, and external interface is required.

As stated above, outline and describe the environment the system will operate in. It is necessary to include the minimum platform requirements for the system.>

## Design and Implementation Constraints <Optional>

<Specify and explain any issues that will limit the options available to developers. These generally include hardware limitations, specific technologies, databases to be used, language requirements, computer communication protocols, security aspects, design conventions as well as programming standards.

The information collected so far has to be analysed in this section.>

## User Documentation <Optional>

<System user documentation components, including user manuals, on-line assistance, and tutorials, that will be delivered with the software should be listed.

Actual formulation of any extensive user-manuals are not required but it is required to describe the types of manuals and the type of help required for the software. Overall, a brief paragraph of content will be sufficient to fulfil this particular section.>

## Assumptions and Dependencies <Optional>

<List any assumptions that could have an impact on the requirements specified in the SRS. These generally include third-party and commercial components as well as issues pertaining to the development or operating environment. In addition to this, identify any dependencies the project has on external factors, including software components that will be reused from another project.

Provide a brief list or outline of the key assumptions that would have an influential impact on the system design.>

# Specific Requirements

## External Interface Requirements

### User Interfaces

<Specify the logical attributes of each system interface that exist between the software and its users. Generally, this includes sample screenshots, GUI standards, and software family style guides that are to be followed, standard buttons and functions that will appear on every screen, and error message display standards. Furthermore, provide the software components for which a user interface is required.

List and describe the various user interfaces as well as the different screens available to the user. Providing graphical user interface screenshots are highly effective.>

### Hardware Interfaces

<Provide the logical and physical characteristics of each interface between the software and the hardware components. This generally includes supported device types as well as the nature of the data and control interactions.

Note that it is not required to specify the protocols that will be used but these are generally provided in this section.

Provide a brief description of the various hardware interfaces>

### Software Interfaces

<List and describe the connections that exist between the software and other specific software such as databases, operating systems, tools, libraries, and integrated commercial components. Identify the data items or messages coming in to the system as well as those going out of the system. The purpose of each of these data items should be provided. Furthermore, describe the services required and the nature of communications. Identify data that will be exchanged across various software component. If the data exchange mechanism should be implemented in a particular manner, described it as an implementation constraint.\*

Note that it is mandatory only to describe the specific interface with the operating system.>

## Functional Requirements

*<Functional requirements relate to the intended behavior of the system. This can be expressed as tasks, functions, or even services that the system is required to perform. Each different product function with specific explanations are required in detail.*

*Breakdown the functional requirements of the software to several areas and provide a list of the product operations related to these functional areas.*

## Behaviour Requirements

### Use Case View

<A system use case illustrates a goal-oriented set of interactions between the external actors and the software.

Provide a clear use case diagram that will depict the entire system and all possible actors. Even though detailed use case descriptions are not recommended here, it is necessary to include a short description of every use-case and the actors identified in the diagram.>

# Other Non-functional Requirements

## Performance Requirements

<Specify clearly any performance requirements of the software and explain their rationale. Provide the timing relationships for real time systems. The state performance requirements for individual functional requirements or features can be provided here.

Provide the performance requirements for the software based on the information acquired from the client.>

## Safety and Security Requirements

<Specify the requirements concerned with possible loss, damage, or harm that could be a result from the use of the software and outline any safeguards or actions that should be taken as well as prevented. Refer to any compatible external safety policies or regulations and provide any related safety certifications. Provide any requirements regarding security or privacy issues pertaining to the use of the software or protection of the data used or generated by the software. User identity authentication requirements can also be described here.

* Describe several safety requirements based on interviews with the client or research.
* Specify the level of security expected from the software by the client, including the primary security requirements.>

Appendix A - Group Log

<Specify all the group meeting minutes, group activities, and other relevant information that will assist the supervisor to determine the effort put forth to produce this document.>