# Software Requirements Specification

for

# IIITB Learning Management System (LMS)

**Version 1.0 approved** 

Prepared by IMT2020059 Manas Agrawal

IIITB

2 September 2022

# **Table of Contents**

<b>Table</b>	of Contents	ii
Revisi	ion History	ii
1. In	troduction	1
1.1	Purpose	1
1.2	Document Conventions	1
1.3	Intended Audience and Reading Suggestions	1
1.4	Product Scope	1
1.5	References	1
2. O	verall Description	2
2.1	Product Perspective	2
2.2	Product Functions	2
2.3	Operating Environment	2
3. Ex	sternal Interface Requirements	3
3.1	User Interfaces	
3.2	Software Interfaces	3
4. Sy	vstem Features	4
•	System Feature 1 (Login)	4
4.2	System Feature 2 (Upload Assignment/grade/content)	4
5. Ot	ther Nonfunctional Requirements	4
	Performance Requirements	4
5.2		5
5.3	Security Requirements	5
5.4	Software Quality Attributes	5

# **Revision History**

Name	Date	Reason For Changes	Version
Version 1.0	Sept 02, 2022	Initial Changes	1.0

#### 1. Introduction

#### 1.1 Purpose

The purpose of this document is to specify detailed description of IIITB LMS (Version 1.0). The document includes purpose, interface, and features of the software.

#### 1.2 Document Conventions

The standard of the document is based on the IEEE template for System Requirement Specification document.

#### 1.3 Intended Audience and Reading Suggestions

This document is intended for the developers, project managers, testers, users, and stakeholders. Users here includes Professors, TAs, Students and College Administration. Stakeholders can just skim through the documentation. It serves as guide to get the idea of what is built. However, it is strongly recommended for developers, testers, and project managers to go through the entire document thoroughly as they are the creators of the app. Basic understanding of how the IIITB LMS works would be helpful.

## 1.4 Product Scope

The main purpose of this software is to manage the academics related content of IIITB efficiently and make it easier for all the students of IIITB to access various resources. As per statistics, number of admissions are increasing in IIITB and thus this software would be of great deal for all the students as well as professors to manage and access their academic related resources more efficiently.

#### 1.5 References

https://learn.iiitb.net/

# 2. Overall Description

### 2.1 Product Perspective

This software is made to replace the archaic system of mailing the contents (and grades) to all the students via Outlook by the professor or the TAs. With the entry of this software,

professor and TAs can now upload the assignment/content/grades into the same platform without taking the headache of mailing the whole batch/college. Students can also just check the same from LMS instead of checking loads of emails from their inbox. With this professors can also give announcements to students without making in-class announcements.

#### 2.2 Product Functions

The major functions are:

- Professors or TAs can upload assignments/contents along with submission portals.
- TAs can upload the grades for all the assignments/quiz.
- Online quizzes can be conducted on this platform.
- Students can mark their attendance on this platform.
- Administration can upload academic/course details here such as Manual or Student Handbook, etc.
- Every course will have a separate portal which makes it easier for professors/TAs/students to access a particular course.
- A general discussion forum is available to discuss and clarify doubts regarding assignments/quiz or to make any announcement.

#### 2.3 Operating Environment

The Learning Management System would work on Android, iOS, windows and MacOS X. It can also be used via any web browser that supports ES6.

# 3. External Interface Requirements

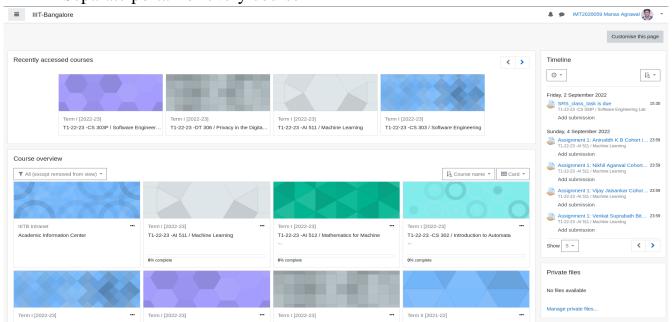
#### 3.1 User Interfaces

• Login Interface for the users

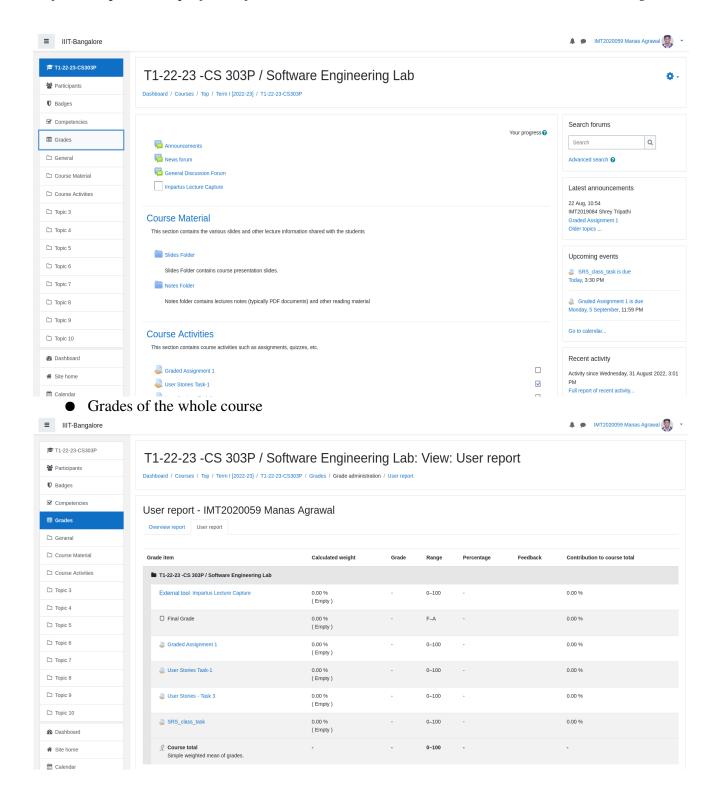




• Separate portal for every course



• Upload Assignments and slides/notes of the class



#### 3.2 Software Interfaces

 It needs to be integrated with an email client to send announcements to students via discussion forum. • It needs to be integrated with codetantra to send attendance and exam results to LMS.

# 4. System Features

#### 4.1 Login

ID	Title	Description	Priority	Risk
1.01	Login	Allows user to	1	Critical
		login via email		

### 4.2 Upload Assignment/Grade/Content

ID	Title	Description	Priority	Risk
1.02	Upload	Allows professor	1	Critical
		or TAs to upload		
		assignment/grade		
		/content		

# 5. Other Nonfunctional Requirements

## **5.1** Performance Requirements

The Internet is a must for requesting services. While making any new module, one shall be careful to design it in such a way that the maintenance time required is very less. The server needs to work 24/7. Make sure of using only https protocols.

## 5.2 Safety Requirements

Users will have an option to hide/unhide itself and the last active time from being viewed by other users. who abuse them.

# **5.3** Security Requirements

This software do not sell any data to third party applications. Users authentication cannot be brute forced. This software is free of SQL injection and other cyber attacks. This software respects user privacy.

# **5.4** Software Quality Attributes

Usability, every person using the software shall have basic knowledge of how the mobile/website works ( Using the UI). The server shall be reliable and the maintenance time shall be very less. There shall be design documents to ensure modularity