

Generate the SRS

## Library Management System

### 1) Introduction

1.1) Purpose → document comprises the requirements of library management system used for automation and library management system

1.2) Scope → This system will handle the books inflow-outflow, author and customer services and pending due

1.3) Overview → library management system helps in ordering and publishing book for the author

### 2) General description

→ The system allows the user with interactive UI to see the list of available books stored in the database, and from there user can rent or lend the book and the author can publish the book

### 3) Functional requirements

1) User/Staff Admin

2) Books storing database

3) Filter books, classifying them based on genre

4) authorization

5) Staff management system



## Interface Requirements

- i) user interface  $\rightarrow$  a response web interface that allows the user to go through the website and check for the available books and rent them or lend them
- (ii) Application Programming interface (API'S)  $\rightarrow$  communication between the web interface and server to check
- (iii) Payment gateway  $\rightarrow$  it helps to make the payment for the book which the user wants to rent
- (iv) database interface  $\rightarrow$  it helps in storing the books the user from the catalog

## Performance requirements

- 1) Security  $\rightarrow$  should provide security and maintain it
- 2) availability  $\rightarrow$  all user should access the available books
- 3) Scalability  $\rightarrow$  it can take as many user connections as needed
- 4) Speed  $\rightarrow$  transaction speed for user should with minimal latency

## Design constraints

- $\rightarrow$  should comply with the payment gate and should have access to the API'S and obtain multiple server outmigration



## 2) Non-functional requirements

Security → should have a secure interface and maintain their privacy

availability → website should be available for the all user and it should show all available books present in the library or catalogs

scalability → it the scale at which the number of user will increase the website reliability

3) Preliminary Schedule → It take 1 year, with a budget of \$10000 considering with integration with Books and Databases

1) Requirement analysis → it takes \$1000 and 1 month

2) Design and implementation → it takes \$2000 and 2 months time

3) verification and validation → it takes \$4000 and 5 months time

4) testing and evaluation → it takes \$3000 and 2 months time