Physical Components

1.Student User Device:

Function: Interact with the system, submit and receive data.

Implementation: Computers, smartphones, etc.

2. Web Server:

Function: Handle user requests, manage dynamic web page generation.

Implementation: Host the web application, communicate with user devices using HTTP/HTTPS.

3. Application Server:

Function: Process business logic, interact with the database, execute main processing tasks.

Implementation: Host application logic, communicate with the web server using REST API.

4. Database Server:

Function: Store and retrieve platform data (user information, book information, transaction records, etc.).

Implementation: Relational Database Management System (RDBMS) like MySQL, PostgreSQL.

5. Payment Gateway:

Function: Process payment transactions.

Implementation: External payment service provider like PayPal, Stripe.

6. Network Infrastructure:

Function: Ensure connectivity and data transmission between all components.

Implementation: Internet, Local Area Network (LAN), VPN, etc.