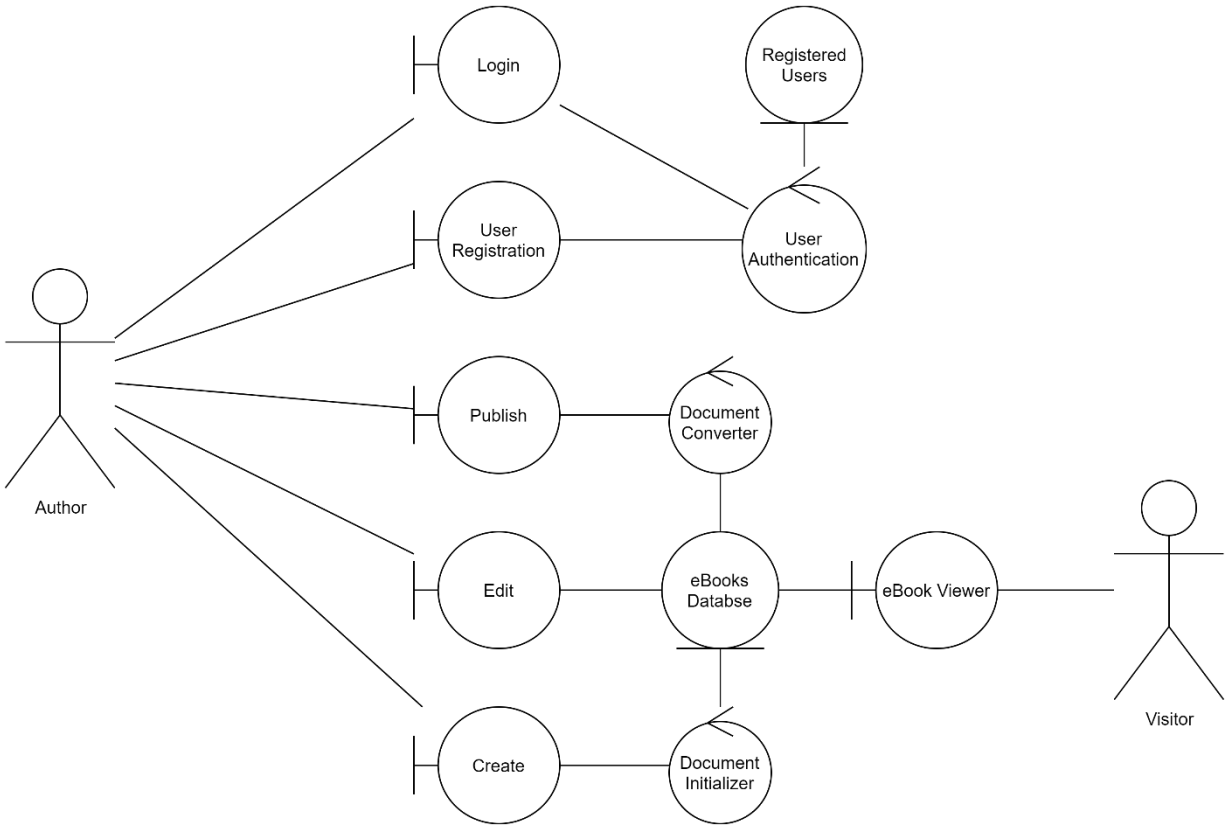
1. Class Diagram



CLASS **Login Class**
RESPONSIBILITY 1. Receives input from a form the user submits containing login credentials 2. Sends the username and password to the **user authentication class** 3. If passed, creates a login session for the user 4. If failed, returns user to login screen with a failed message
COLLABORATION **User Authentication Class Registered Users Class**

CLASS **User Authentication Class**
RESPONSIBILITY 1. Receives username and password from **login class** 2. Converts password to SHA-256 hash 3. Sends username and hashed password to **registered users class** for authentication
COLLABORATION **Registered Users Class**

CLASS **Registered Users Class**
RESPONSIBILITY 1. Stores usernames and password hashes 2. Compares username and password hash with stored value when requested by **user authentication class** 3. Checks for collisions for new user requests from **registration class** 4. Adds a new username and password hash when requested by **registration class**
COLLABORATION **User Authentication Class Registration Class**

CLASS **Registration Class**
RESPONSIBILITY 1. Receives input from the user with username and password for registering a new account 2. Sends login information to **registered users class**
COLLABORATION **Registered Users Class**

CLASS **Create Class**
RESPONSIBILITY 1. Receives eBook name, description, private/public status from the user 2. Sends this information to **Document Initializer Class**
COLLABORATION **Document Initializer Class**

CLASS **Edit Class**
RESPONSIBILITY 1. Receives eBook name from user
2. Searches the **eBooks Database Class** for the eBook 3. If found, loads the eBook into the editor
COLLABORATION **eBooks Database Class**

CLASS **Publish Class**

RESPONSIBILITY
1. Receives request to publish from the user 2. Receives requested file type from the user 3. Sends the eBook name to be published and requested file type to the **Document Converter Class**
COLLABORATION **Document Converter Class**

CLASS **Document Converter Class**
RESPONSIBILITY 1. Receives a raw format document from **Publish Class** 2. Receives a file type request from **Publish Class** 3. Converts the raw document to the requested file type 4. Sends the converted document to **eBooks Database Class** for storage
COLLABORATION **Publish Class eBooks Database Class**

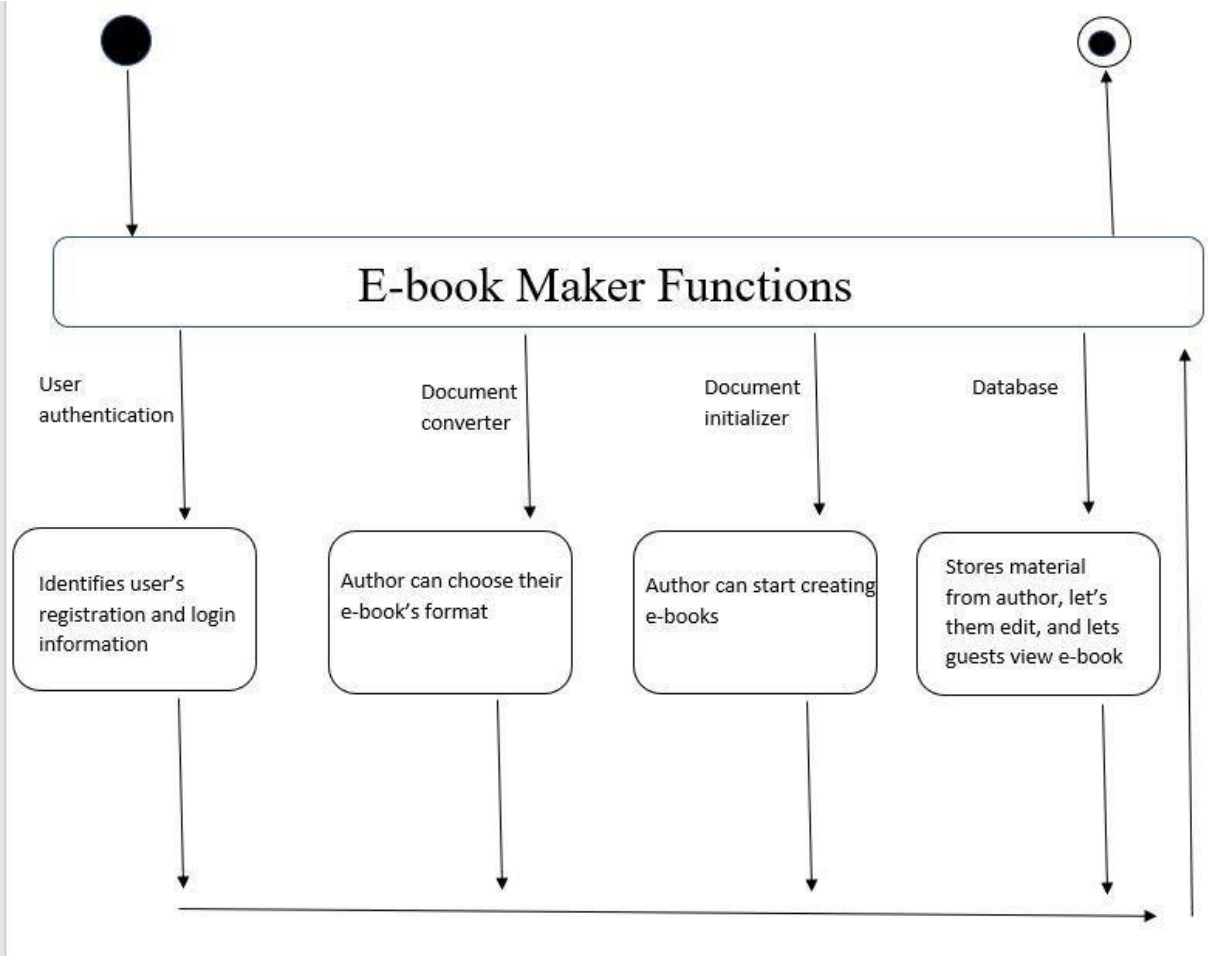
CLASS **eBooks Database Class**
RESPONSIBILITY 1. Stores eBook Documents 2. Receives converted files from **Document Converter Class** for storage 3. Receives raw files from **Document Initializer Class** for storage 4. Receives raw files from **Edit Class** for storage 5. Searches the database for requested documents for **View Class**
COLLABORATION **Document Converter Class** **Document Initializer Class Edit Class**

View Class

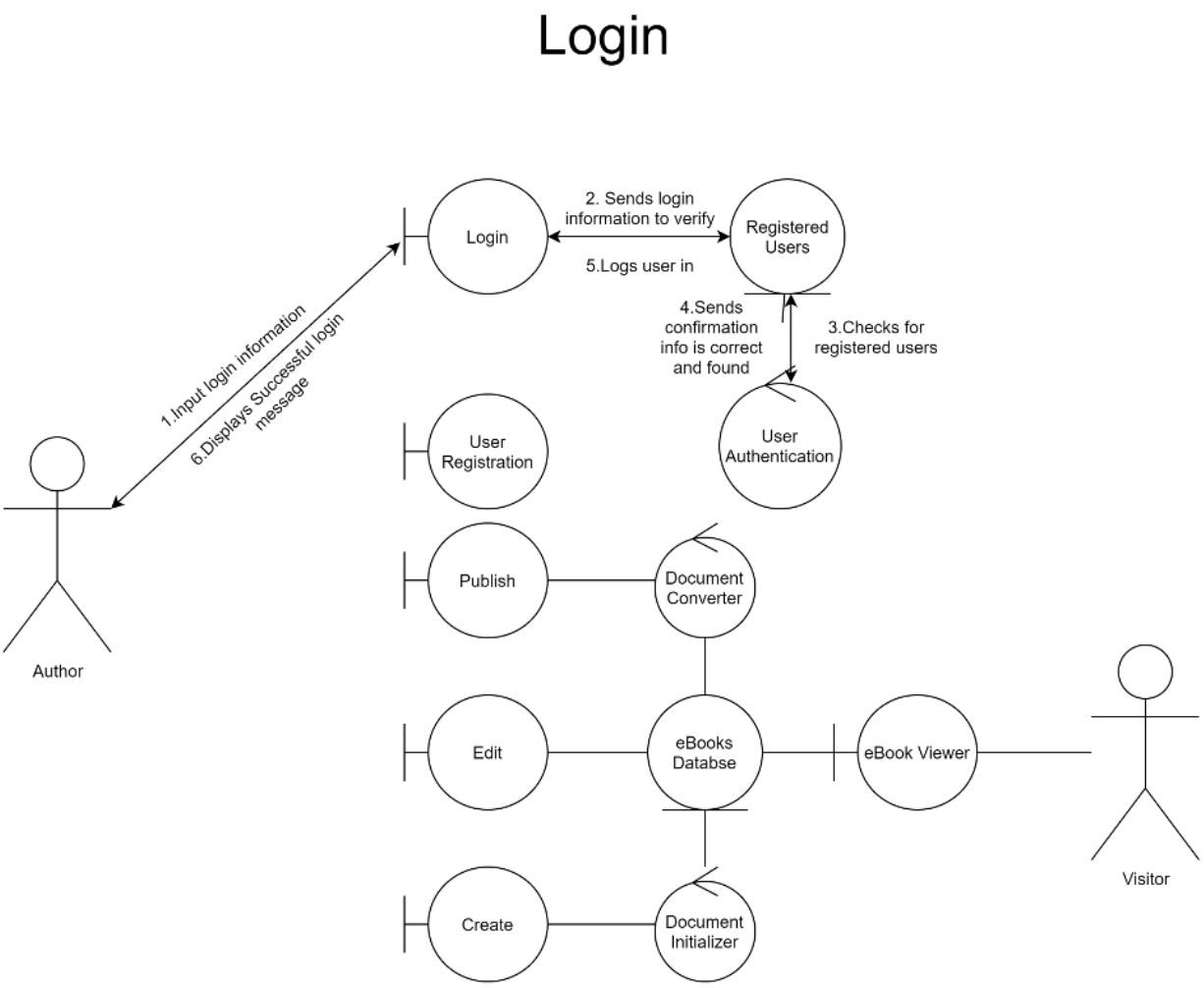
CLASS **Document Initializer Class**
RESPONSIBILITY 1. Receives new document information from **Create Class** 2. Produces a new document file 3. Sends the document information to **eBooks Database Class**
COLLABORATION **Create Class eBooks Database Class**

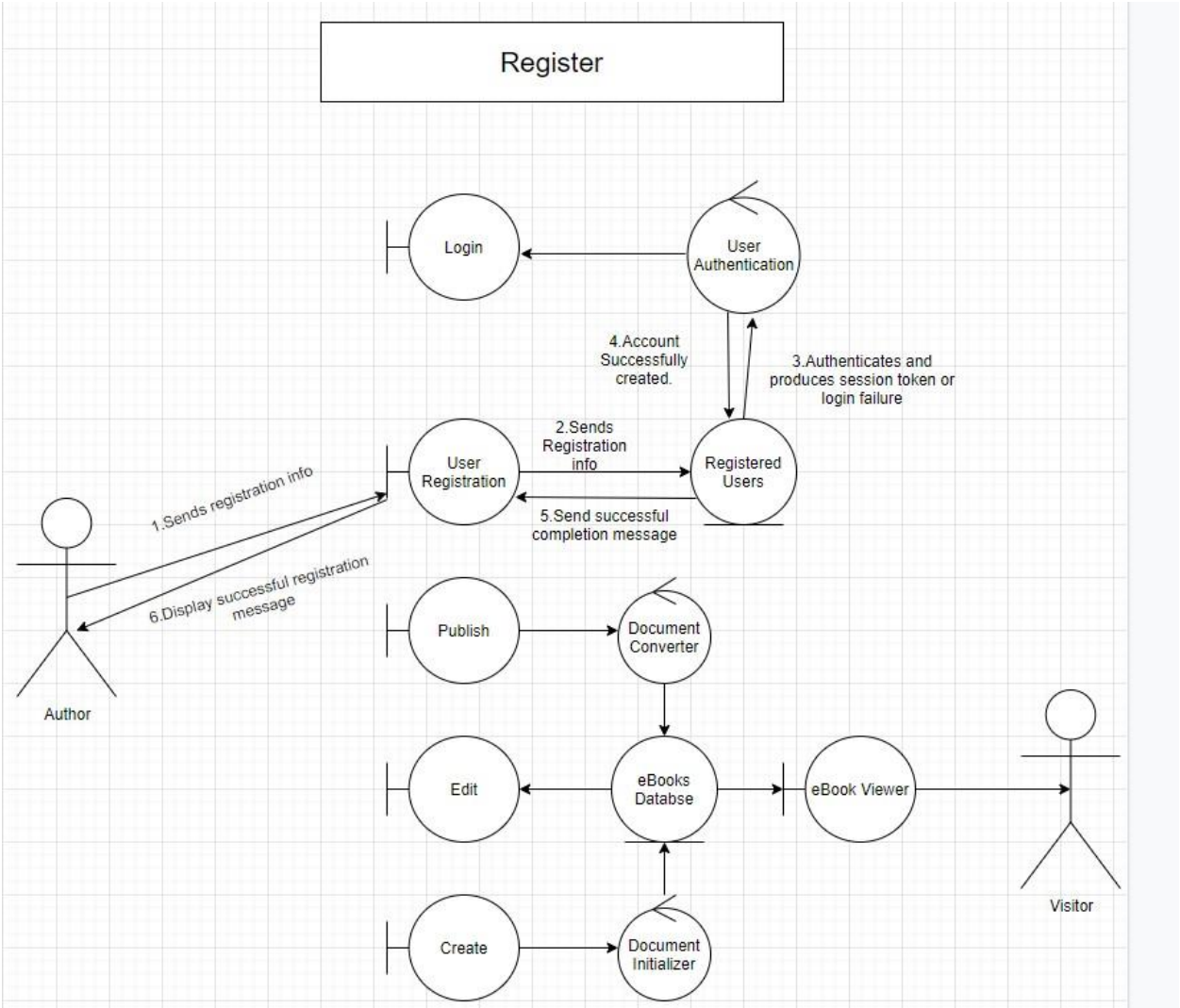
CLASS **View Class**
RESPONSIBILITY 1. Provides user with options to filter and search for documents 2. Provides user with a list of documents based on the filters 3. Receives document request from user 4. Searches the **eBooks Database Class** for the document 5. Displays the document to the user
COLLABORATION **eBooks Database Class**

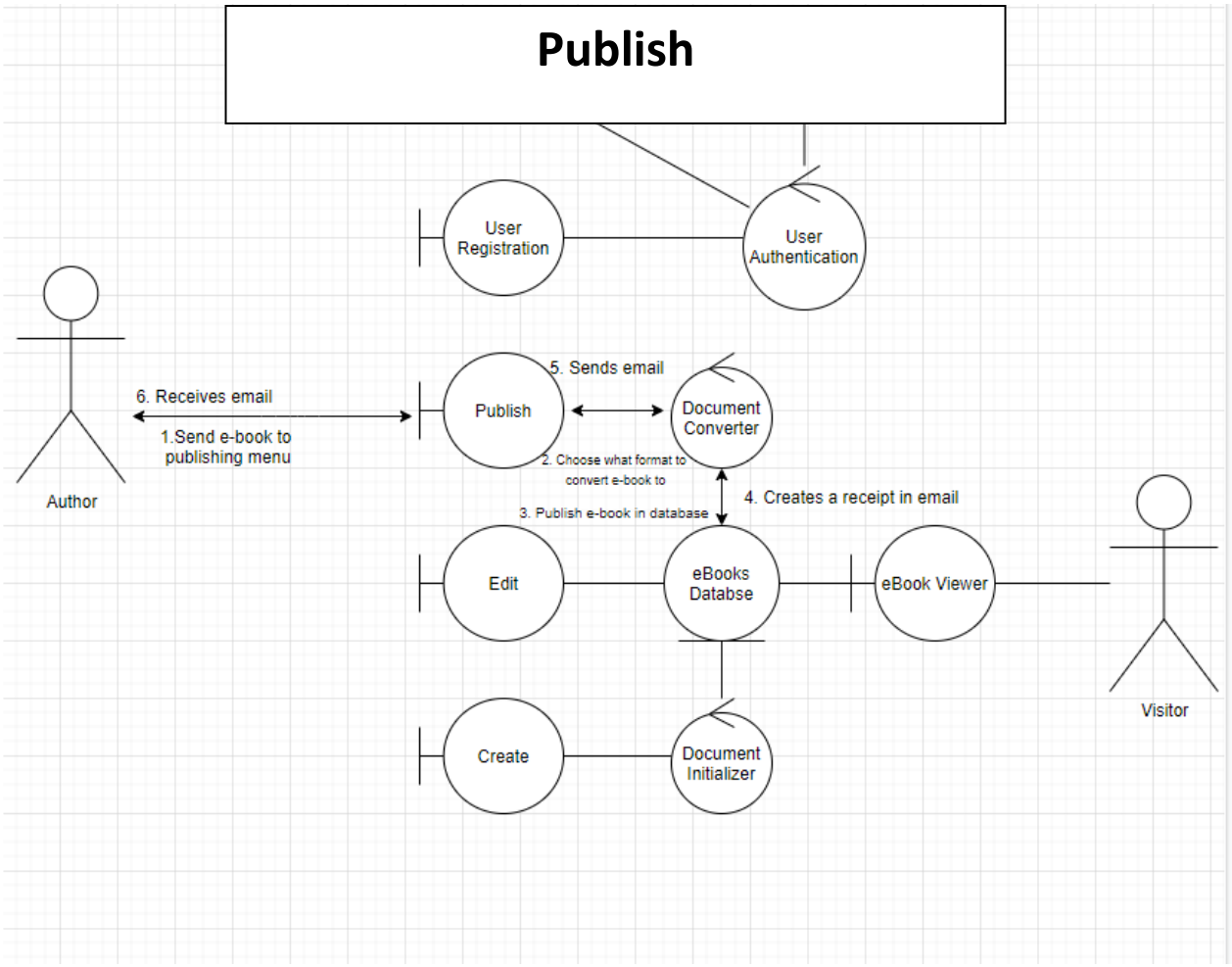
2. State chart



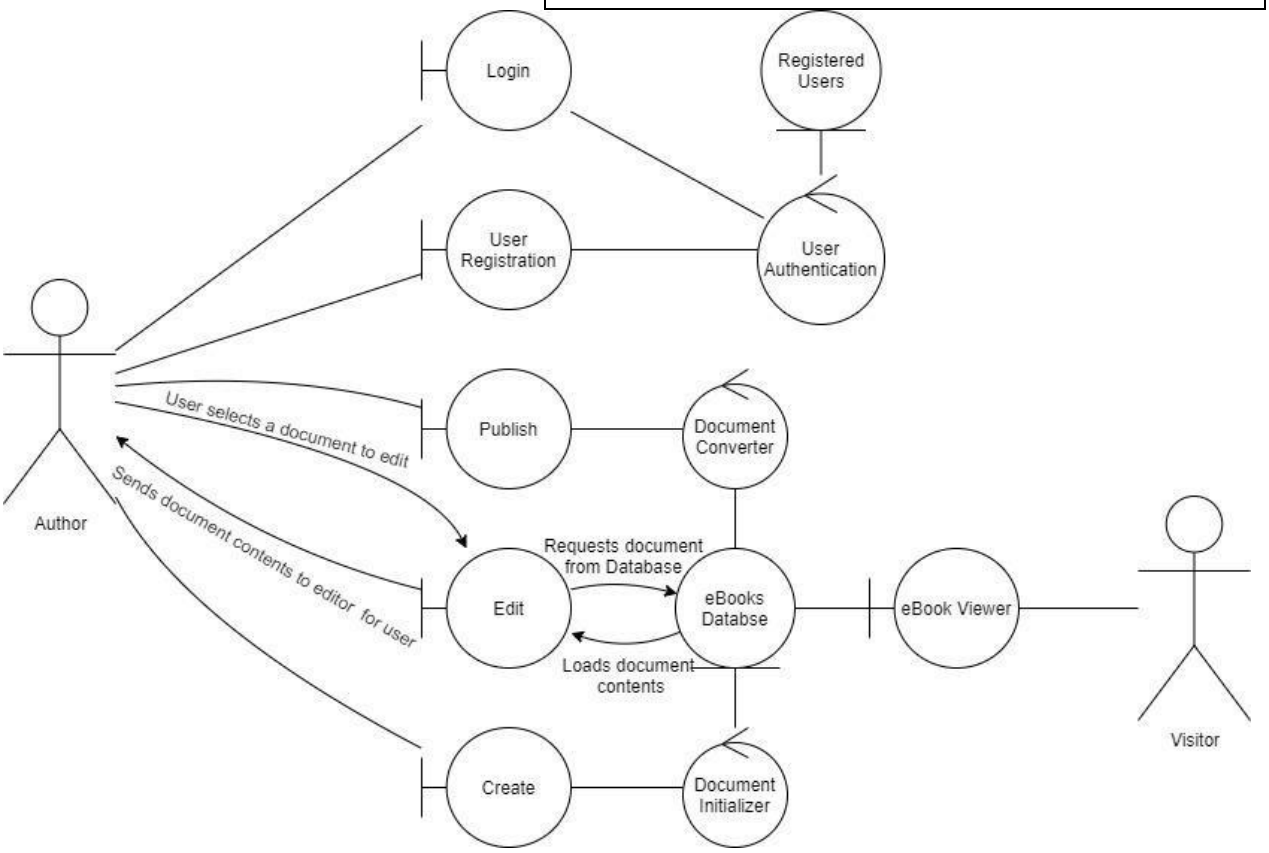
3. Use-case realization



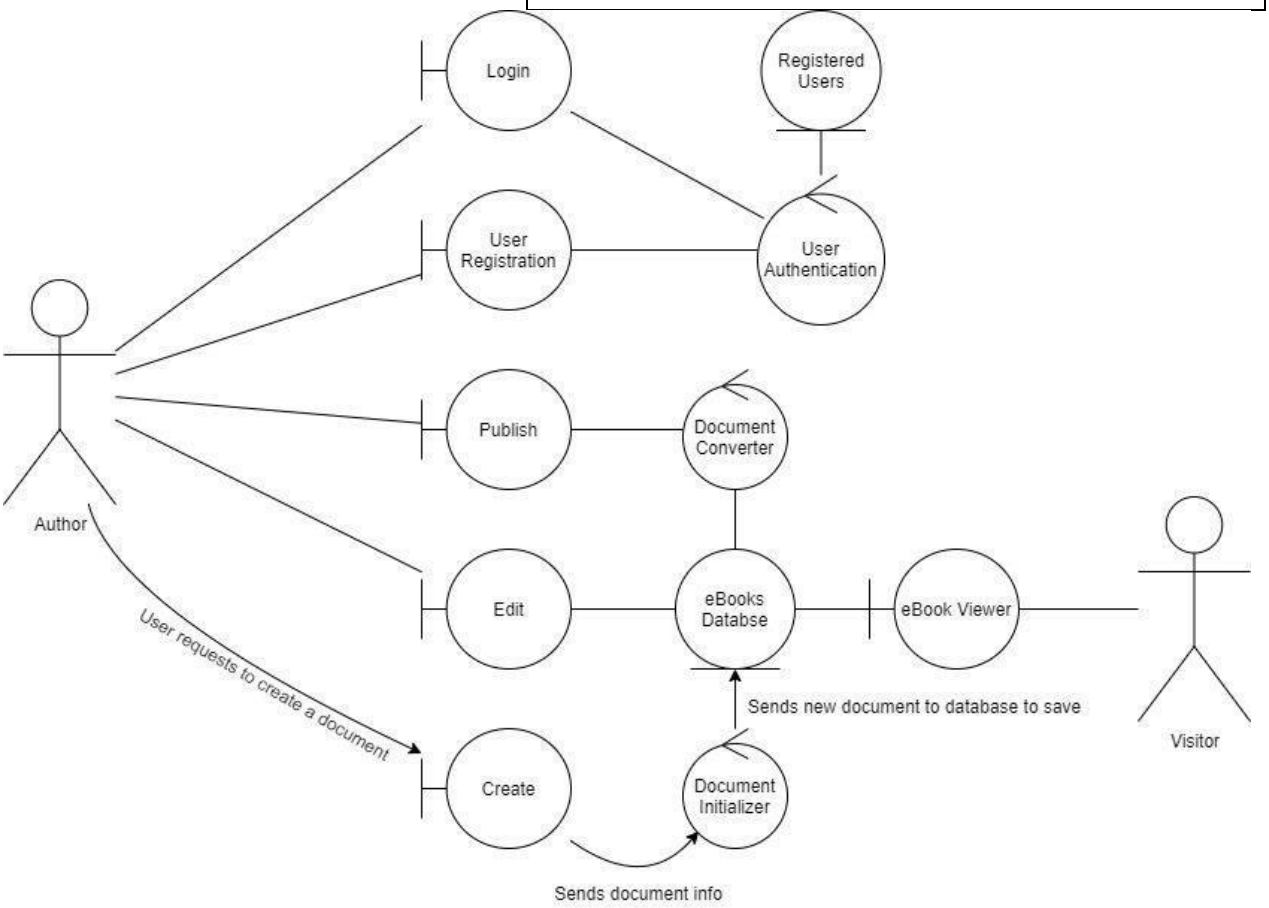
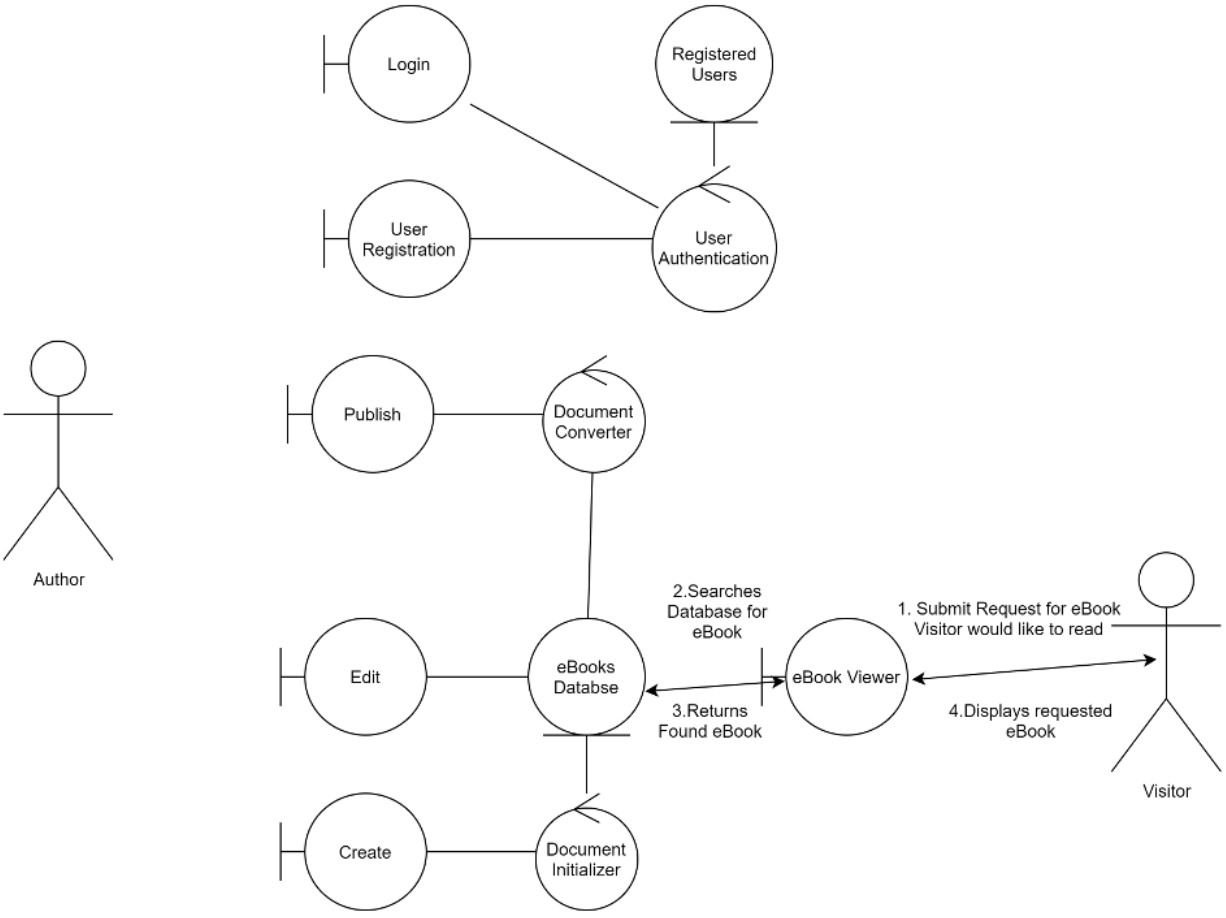

Register
Login
User Authentication
4.Account Successfully created.
3.Authenticates and produces session token or login failure
2.Sends Registration info
User Registration
Registered Users
1.Sends registration info
5.Send successful completion message
6.Display successful registration message
Author
Publish
Document Converter
Edit
eBooks Databse
eBook Viewer
Visitor
Create
Document Initializer


Publish
User Registration
User Authentication
Author
6. Receives email
1.Send e-book to publishing menu
Publish
5. Sends email
Document Converter
2. Choose what format to convert e-book to
3. Publish e-book in database
4. Creates a receipt in email
Edit
eBooks Databse
eBook Viewer
Visitor
Create
Document Initializer

Edit


Login
Registered Users
User Registration
User Authentication
Author
User selects a document to edit
Publish
Document Converter
Sends document contents to editor for user
Requests document from Database
Edit
eBooks Databse
eBook Viewer
Loads document contents
Visitor
Create
Document Initializer

Create


Login
Registered Users
User Registration
User Authentication
Author
Publish
Document Converter
Edit
eBooks Databse
eBook Viewer
Visitor
User requests to create a document
Sends new document to database to save
Create
Document Initializer
Sends document info

eBook Viewer