JUST Journal

Functional Requirements

1. Users can register with email and password.
2. Users can log in.
3. Author can upload research (.doc and .pdf).
4. Editor can view submitted/uploaded research.
5. Editor can Approve, Reject and Add notes.
6. Editor can categorize the research(based on faculty).
7. System will send email notifications.
8. Viewer can search for approved researches by name.
9. Viewer can view approved researches by faculty/category.

Functions:

1. initiateUser(name, privillege, email)
   creates a row in users table with the provided data.
   FR1

2. generateSecret(email)
   generates a random 6 digits number, uses helper functions to update the secret in db and send it to the user
   FR1

3. insertIntoDB(tableName,columns,values)
   Generic helper used to insert a new row into any table.
   Helper

4. updateDB(tablename,columns,values)
   Generic helper used to update any row in any table
   Helper

5. sendEmail(emailBody)
   Sends an email to a specific user based on system events.
   Helper

6. verifySecret(email, secret)
   Checks if the secret matches the stored secret in the database.
   FR1

7. validateFileType(file)

   Checks if uploaded research is only .doc or .pdf.

   Type: Helper

8. loginUser(email, password)

   validates user credentials and generates an authentication token.
   FR2

Users:

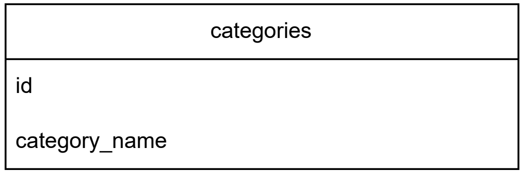
1. Author
2. Editor
3. Researcher

Database:

users
id
email
password(hash)
name
privillege
secret
verified

research
research_id
research_title
research_description
file_path / content (bytea)
status
author_id
editor_notes
category_id

APIs:



categories
id
category_name

uploadResearch(authorId, file, title, facultyId)

uploads a research file (.doc/.pdf) and creates a row in the research table with status “Pending”.

9.

10. viewSubmittedResearch()
retrieves all uploaded research with status “Pending”.

11. approveResearch(researchId, notes)
updates research status to “Approved” and saves optional notes.

12. rejectResearch(researchId, notes)
updates research status to “Rejected” and saves notes.

13. addEditorNotes(researchId, notes)

adds or updates notes for the research.

14. categorizeResearch(researchId, facultyId)
assigns or updates the faculty/category for a specific research.

15. sendNotificationEmail(emailBody, toEmail)
sends email notifications to users for events like submission, approval, or rejection.

16. searchApprovedResearchByName(searchTerm)
searches approved researches by title or name.

17. viewApprovedResearchByFaculty(facultyId)
retrieves approved researches filtered by faculty or category.

1. /request
POST
-name
-privillege
-email
FR1

2. /verify
POST
-email
-secret
FR1

3. /auth/login
post
-email
-password
FR2

4. /author/research/upload
post
-author id
-file(.doc or .pdf)
-title
-facultyId (optional at upload, can be categorized later)

5. /editor/research/approve
post
-researchId
-notes (optional)

/editor/research/reject
post
-researchId
6. -note

7. /editor/research/notes
post
-researchid
-note

8. /editor/research/category
post
-research id
-faculty Id

9. /system/notify

9. /system/notify
post
-email
-emailBody

/viewer/research/search
get
-searchTerm

10.

11. /viewer/research/faculty
get
-facultyId