****

**BOOKNEST: Initial Project Report**

By

Jamile Obeid, **ID:** 762004935

Malak Alqaryouti, **ID:** 759007889

Lana Kendakji, **ID:** 757001591

Sara Hijazi, **ID:** 387006935

**Supervised by**

Dr. Ali Assi

Department of Electrical Engineering and Computing

Rochester Institute of Technology, Dubai

United Arab Emirates

Spring 2025

**Summary**

BOOKNEST is a full-stack application website designed for book lovers to discover, review, and track books. Users will be able to manage their reading lists, explore Nobel-Prize winning authors, and discover books from different genres. Our application will be implemented with SpringBoot as back-end and Semantic UI as front-end.

**Project Scope and Timeline**

| **Phase** | **Frontend Tasks** | **Backend Tasks** | **Timeline** |
| --- | --- | --- | --- |
| Week 1 | Create Home Page | - | Initial setup |
| Week 2-3 | Initializing all of the frontend web pages using the core features | User Authentication | Core features |
| Week 3-4 | - | Working on the backend | Advanced features |
| Week 5 | Fixing any errors | Fixing any errors | Testing and fixing |
| Week 6 | Reviewing & Finalizing codes | Reviewing & Finalizing codes | Final review |

**Key Features**

1. **User Authentication:** Users can signup/login to their profiles.
2. **Book Tracking:** Users can classify books to one of the three lists: ‘Want to Read’, ‘Currently Reading’, or ‘Read’.
3. **Book Reviews:** Users can add/edit/delete reviews to books.
4. **Home Page:** Displays featured book lists and fun facts.
5. **Discover Page:** Book recommendations by genre.
6. **Nobel Prize Winners Page:** Information about award-winning authors.
7. **Profile Page:** Users can manage their book lists and personal information.

**User Scenarios**

**Scenario 1: Tracking & Discovering Books**

1. Sign up or log in
2. Search for a book
3. Add it to “Want to Read”, “Currently Reading, or “Read”

**Scenario 2: Reviewing a Book**

1. Find a book in the Discover page
2. Give a review and write a rating

**Scenario 3: Exploring Nobel Prize Winners**

1. Visit the Nobel Prize Page
2. Browse the list of winners
3. Click on the ‘see more’ option for any author to see their work & background

**Implementation Details**

* **Front-end:** HTML, CSS, JavaScript, Semantic UI.
* **Back-end:** Java Spring Boot.
* **Database:** MySQL.
* **Version Control:** Git and GitHub Repository.

**Anticipated Challenges & Mitigation Strategies**

|  | **Challenge** | **Mitigation** |
| --- | --- | --- |
| **1** | Database Design | We plan to finish the ER diagrams and data normalization beforehand to avoid any future database design challenges. |
| **2** | Front-End Responsiveness | We will include media queries so that our website will be responsive for various device sizes. |