Proposal

Final Project – Proposal Submission

Project Title: ReOwn

Project Description:

"ReOwn" is a web-based platform that allows users to buy, sell, and exchange used items safely and efficiently.

The system connects people who want to sell items they no longer need with others searching for affordable second-hand products.

It aims to promote sustainability, waste reduction, and cost-effective purchasing by creating a trusted community for trading used goods.

Users can post their items with photos and descriptions, browse by category, communicate through chat, and even request product exchanges.

Admins manage listings, monitor reports, and ensure safe interactions between users.

Group Members & Roles:

| Name | Role |
|--------------------------------|---|
| Mennat-Allah Ashraf Elsayed | Team Leader & Backend Developer & database designer |
| Somaya medhat Mahdy | Frontend developer & Tester |
| Amgad Ahmed Salah | UI/UX Designer & Frontend developer |
| Ahmed Elsayed Ahmed | Frontend developer & Backend developer |
| Mariam Mohamed Mohamed | Frontend developer & Tester |
| Hana Elsayed Hassan | Frontend developer & presentation maker |

Team Leader:

Menna Elgharabawii

Objectives:

- 1. Allow users to register, log in, and manage their profiles.
- 2. Enable sellers to post, edit, and delete used items.
- 3. Implement advanced search and filter features (by category, price, or location).
- 4. Build an internal messaging system between buyers and sellers.
- 5. Support item exchange requests (swap function).
- 6. Provide an admin dashboard for content moderation and category management.
- 7. Ensure the platform is secure, responsive, and user-friendly.

Tools & Technologies:

| Layer | Tools & Technologies |
|-----------------|--|
| Frontend | React.js, HTML, CSS, JavaScript , Tailwind |
| Backend | Node.js, Express.js |
| Database | MongoDB |
| Version Control | Git & GitHub |
| Design Tools | Figma, Canva (for UI mockups) |
| Testing | Postman (for API testing) |
| Hosting | Render / Firebase |

Milestones & Deadlines:

| Task | Deadline |
|--|------------|
| Proposal preparation and approval | 12/10/2025 |
| UI/UX | 20/10/2025 |
| Project setup & Database creation | 25/10/2025 |
| Core feature implementation (CRUD, login,register) | 8/11/2025 |

| Task | Deadline |
|---|------------|
| Home Page & Profile Page & Cart Page & Admin Dashboard & Checkout | 15/11/2025 |
| Integration with Backend | 17/11/2025 |
| Testing, bug fixing, and documentation | 20/11/2025 |
| Final presentation and report submission | 28/11/2025 |

KPIs (Key Performance Indicators):

1. Code Quality & Development

- Clean, modular, and reusable code.
- Clear project folder structure and comments.
- Test coverage for main functions and routes.
- Proper state management on frontend.

2. Performance & Optimization

- API response time under 1 second for standard requests.
- Fast page load times (<2 seconds on desktop).
- Optimized images and caching for repeated users.

3. User Experience (UX)

- Fully responsive design for all devices.
- Simple and intuitive navigation.
- Accessibility (contrast, readable text, clear buttons).
- High user satisfaction in testing feedback.

4. Deployment & Scalability

- Successful deployment on a cloud platform (Render).
- SEO-optimized URLs and metadata for discoverability.

5. Business & Functional Impact

All core features completed before deadline.

• Smooth transaction flow between buyer and seller.