

CSE347 (Information System Analysis and Design)

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Section: 06

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Project Proposal Accessories and Equipment Rental System

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Objective of the project

The main goal of our project is to create a simple and useful web platform where people can rent or share equipment and accessories with each other. It's made for everyone, including places like university campuses, neighborhoods, or even co-working spaces where people might have items they don't use all the time but others could borrow, such as books, camera gear, music instruments etc. The platform helps connect people who have resources with those who need them temporarily.

Our web application (Accessories and Equipment Rental System) will allow users to list items with details and availability, while others can view, book, and request those items. It will also have user profiles, booking history, and a basic reputation or rating system to build trust. There will be features like reminders for returns, overdue notices, and even basic agreement terms so everyone feels safe renting or lending.

This platform promotes the idea of resource-sharing and sustainability. Many people own tools or items they use just once in a while, this system helps reduce waste and encourages people to help each other while maybe earning a small side income. It's about building a smart, helpful, and self-sustaining community using a simple digital solution.

Rationale of the Project

There are many situations where people need tools or equipment for a short time but don't want to buy them. At the same time, others have these items lying around unused. Our system helps connect both sides and makes the process easy and safe. The main reasons for choosing this project are listed below:

1. Many communities and students often need items like tools, sports gear, or electronics just for a few hours or days. Buying them is expensive, and

borrowing can be hard without a proper system. This platform solves that problem.

- 2. A lot of people already own things they don't use regularly. This project gives them a way to share or rent out those items and even earn a little extra income on the side.
- 3. It encourages a sharing mindset in the community, where people help each other instead of wasting resources. It's not just about money, it's also about building trust and support.
- 4. Existing systems like library checkouts are limited and not flexible. Our platform will support peer-to-peer rentals, availability calendars, and user reviews, making it more modern and useful.
- 5. It also creates a responsible environment by keeping track of borrowed items, sending return reminders, and showing user ratings, which helps reduce damage or loss.

Stakeholders

In any project, there are different people involved who are affected by or contribute to the success of the system. These are called stakeholders. For our Accessories and Equipment Rental System, the main stakeholders are listed below:

1. Community Members (Main Users):

These are the people who will use the platform to list, rent, or borrow items. They can be students, neighbors, or people in a shared working space. They are the most important stakeholders because the system is built for them.

2. Item/Accessories Owners:

People who have tools, accessories, or equipment they don't use all the time.

They can rent out these items through the platform and earn a small income. They will benefit by putting their unused items to good use.

3. Borrowers or Renters:

These are people who need something temporarily, like a projector for a day or a drill for a quick repair. They will use the system to find and book these items easily without needing to buy them.

4. Community Groups, Clubs or Organizations:

Local clubs, university departments and other organizations can use the system to manage shared resources like sound systems, sports gear, or project tools. It helps them stay organized and track usage.

5. Developers (Us):

We are the creators of this project and responsible for building and maintaining the website. We also gain experience in web development, design, and solving real-life problems through this project.

Requirement Collection

To make a useful and successful rental system, we need to understand what the users actually want. That's why collecting proper requirements from our stakeholders is important. Below are the different ways we plan to gather those requirements:

1. Talking to Students and Community Members:

We will speak with people from our university and local communities to know what kind of items they usually need or are willing to lend.

2. Online Survey (Google Forms):

We will create a short online form to ask users about their preferences, like what features they want, what items they often borrow, and how long they

usually need them.

3. Personal Experience and Observation:

As students, we often face situations where we need something for a short time (like a projector or camera). We will use our own experience to decide what features are most helpful.

4. Feedback from Friends, Social Media platforms and Peers:

We will ask our friends and classmates to test the early versions of the website and give honest feedback. This will help us improve the system before final submission.

Business Value of the Project

Our Accessories and Equipment Rental System offers a simple but powerful way to help people share resources and earn extra income. It saves users money by letting them borrow instead of buy, and also helps owners make use of their unused items. This kind of system is especially useful for students, small communities, or co-working spaces where people often need items temporarily.

The platform also creates opportunities for future business growth. For example, we can take a small commission from each successful rental as a service fee. Item owners can also pay a small amount to promote their items at the top of search results, like sponsored listings. These features allow us to earn money while still keeping the platform affordable.

In the long run, the system could be expanded to serve local businesses or event organizers who need to manage rental inventory. It can also be turned into a full product with user subscriptions, premium features, or partnerships with tool and equipment brands. This makes the project not only helpful for the community, but also a valuable and scalable business idea.

Technology Used for Development

The technologies that we will use for this project are given below.

1. **Frontend Technologies:** CSS, HTML, Javascript, React.js(if needed)

2. Backend Technologies: PHP

3. **Database:** MySQL

4. Web Hosting Platform: InfinityFree

Using these technologies, we can properly make the web application project successful and be able share it with everyone to use.