# Capstone Project Technical Barriers Assessment

## Name of Project: Hospital Bed Availability & Tracking System (HBATS)

## Lead Developer: Jaspreet Kaur

## Potential Project Barriers

### Content

* **Dummy Data generation:** A substantial quantity of realistic dummy data (wards, beds, patients, and staff accounts) is needed for testing in this project. This data will take a lot of time to generate manually.

**Solution:** I will automatically create realistic-looking fake data using Laravel’s database factories and seeders. This method will effectively add diverse, reliable test data to the database that is easily reset to a known state for testing.

### Technology

#### Stack

* **State Management with sessions:** Using PHP sessions to implement and store user login state across several pages requires careful consideration of security and appropriate session handling.

**Solution:** Before incorporating it into my primary project, I will conduct a thorough study of PHP session management and put a basic login/logout prototype into place to comprehend the session management workflow.

#### 3rd Party Libraries and/or Frameworks

**Laravel Framework Integration**: There is a learning curve while working with Laravel’s capabilities and architecture, which calls for concentrated comprehension.

**Solution:** For database operations, authentication, and security, I will make use of built-in features of Laravel while avoiding unnecessary third-party packages to keep in order to focus on the essential features.