

# MediConnection

## Test Results

### Error 1:

**Error encountered:** Bug encountered during the compilation of the Project.

**Test code:** Unit Testing

**Root cause:** SocketIO was initially placed in the MongoDB creation, which flagged multiple errors.

**Solution:** Isolate the SocketIO code (Extracted it from local Schema creation).

### Error 2:

**Error encountered:** Patient profile data not being displayed correctly

**Test code:** Unit test for rendering patient profile component

**Root cause:** Incorrect data mapping from the API response to the component's state

**Solution:** Modify the data mapping to match the expected structure of the patient profile component

### Error 3:

**Error encountered:** Unable to create a new appointment

**Test code:** End-to-end test for the appointment creation workflow and integration testing

**Root cause:** Missing validation for required appointment details (e.g. date, time, doctor)

**Solution:** Implement validation checks for required fields and display error messages when necessary

### Error 4:

**Error encountered:** Unable to save prescription data to database.

**Test code:** Integration test for saving prescription data to the database

**Root cause:** Incompatible data types between the application and the database schema

**Solution:** Update the data types in the database schema and ensure proper data conversion during save operations

### **Error 5:**

**Error encountered:** Chat messages not updating in real time

**Test code:** End-to-end test for chat system functionality

**Root cause:** Inefficient use of polling for message updates

**Solution:** Implement real-time updates using WebSockets to ensure smooth communication between users

### **Error 6:**

**Error encountered:** available time slots for appointments not displaying correctly

**Test code:** Unit test for rendering appointment time slots, interface testing

**Root cause:** Incorrect filtering of available time slots based on doctor's availability

**Solution:** Improve filtering logic to accurately display available time slots

### **Error 7:**

**Error encountered:** Inconsistent UI/UX across different pages

**Test code:** Interface testing

**Root cause:** Inconsistent usage of Bootstrap components and custom CSS

**Solution:** Standardize the usage of Bootstrap components and create a shared style guide to maintain consistency

### **Error 8:**

**Error encountered:** Application crashes when a user tries to access an unauthorized page

**Test code:** Integration test for user authorization and access control

**Root cause:** Missing error handling for unauthorized access attempts

**Solution:** Implement proper error handling and redirect unauthorized users to a suitable error or login page

### **Error 9:**

**Error encountered:** Slow loading times for patient profiles and page content

**Test code:** Performance testing

**Root cause:** Inefficient data fetching and rendering patterns

**Solution:** Implement lazy loading, and/or caching to improve performance

## **Error 10:**

**Error encountered:** Security vulnerabilities in the authentication system

**Test code:** Security testing and penetration testing

**Root cause:** Weak encryption methods and lack of validation checks

**Solution:** Use secure encryption algorithms (e.g., bcrypt) and implement server-side validation to prevent unauthorized access and data breaches