



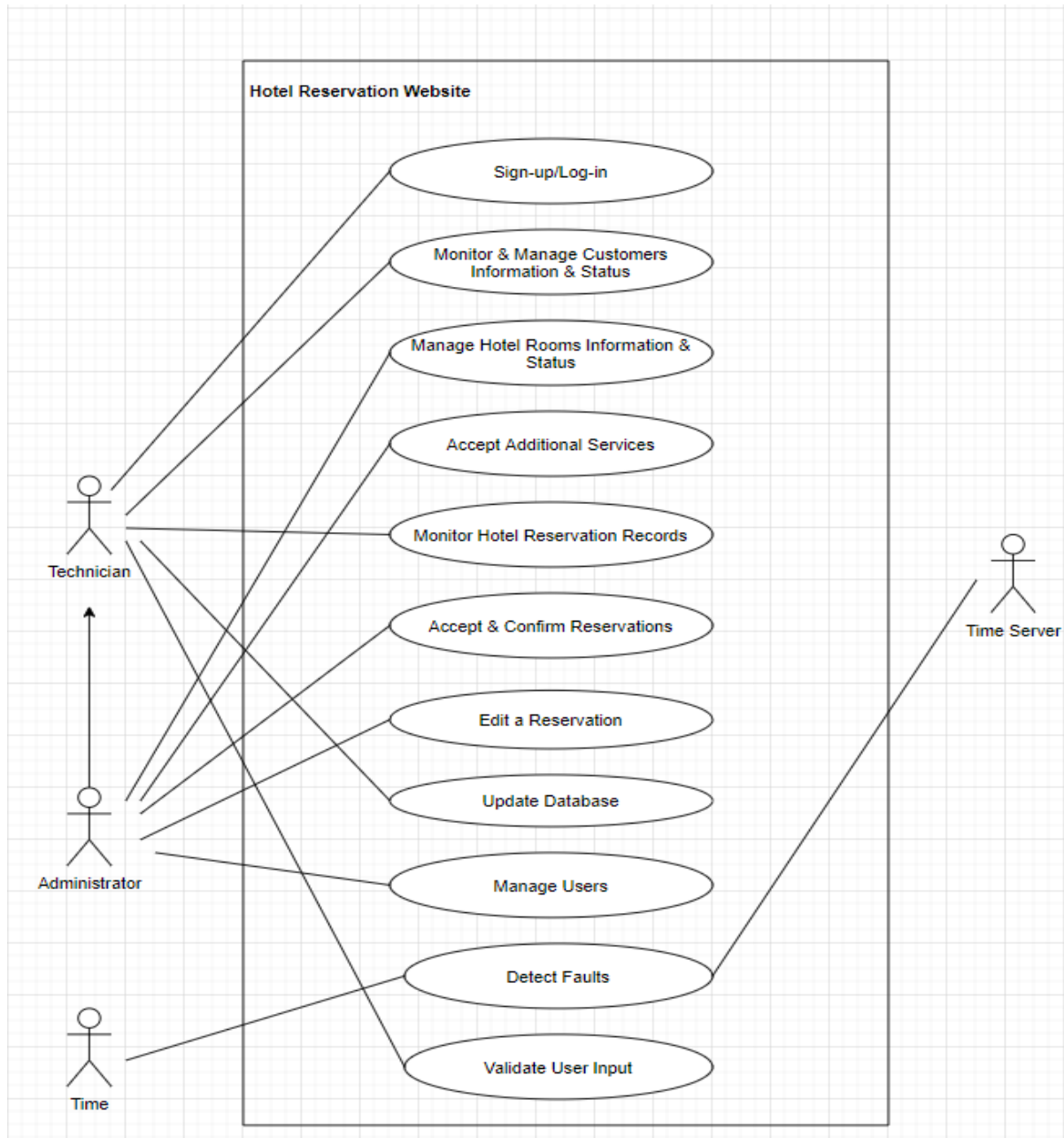
Group Progress Report

Group #14

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Use Case Model



Use cases and their descriptions

Use case	Description
UC-1: Sign up/log in	A user or administrator should be able to log in or register into the reservation system by going onto the login or sign-up screen. After the user has logged in they will now have access to different options based on their role.
UC-2: Monitor and Manage Customers' Information and Status	The user or administrator should be able to modify, monitor, and manage the user's information and status in the system.
UC-3:Manage Hotel Rooms Info and Status	The administrator can change hotel room descriptions, change whether a hotel room is available for booking or not, and change other information
UC-4:Accept additional services	The user should be able to request for additional services from the hotel which the administrator must be able to perform.
UC-5:Monitor Hotel Reservation Records	The administrator should be able to monitor the reservations of various users in the entire network.
UC-6: Accept and confirm reservations	The administrator should be able to accept requests from customers and cancel them as well.
UC-7: Edit a reservation	Users should be able to edit their current hotel booking and change the time or date
UC-8: Update database:	The database is modified every time a user is added or removed. When a user books a hotel room and makes a payment the information is updated to the database.
UC-9: Manage Users	The administrator can add or remove users or modify their permissions
UC-10: Detect Faults	The system should be able to detect faults in the reservation servers.
UC-11: Validate User inputs	When the user logs into their account or enters their payment information, the system should first check and see if the information entered by the user is valid and matches the records.

Quality Attributes associated with the use cases

ID	Quality Attribute	Scenario	Associated use case
QA-1	Performance	The system sends notifications for users and managers every time a customer books or leaves the hotel.	UC-8
QA-2	Modifiability	The System updates its security settings every time there is one available without affecting other components of the system. The system will send updates to the database when the user registers for an account or will modify the database when a user is removed or registration is made.	UC-7, UC-8, UC-9
QA-3	Availability	The system server will stay running for 10 minutes after a power outage using the UPS we install, for users to back up data. The system will be running 24/7 for users to access multiple hotels and book hotels at any time.	ALL
QA-4	Usability	The UI in the system is user-friendly and self-explanatory, in addition to that the system provides additional navigation help if needed. Users should be able to navigate through the website in less than 4 clicks.	UC-1, UC-7
QA-5	Security	The system will check the user's input to verify that the input is correct when the user tries logging in. If the user fails to log in multiple times the system will consider it as a red flag to prevent other users from accessing others' private information.	UC-1, UC-11

System Constraints associated with the use cases

ID	Constraints
CON-1	A minimum of 100 simultaneous users must be supported
CON-2	Can be accessed through various operating systems(Windows, MacOS, Linux) through multiple web browsers(Chrome, Firefox, Edge, Explore)
CON-3	The system should be up to date with reservation details
CON-4	A reliable connection between the user and servers must be established and consistent
CON-5	The system should respond promptly to requests for information from the database or servers