Use Case UC12: Display Dashboards

Scope: ReserveWell Application

Level: user goal

Primary Actor: Restaurant Manager, Waitstaff

Stakeholders and Interests:

- Restaurant Manager: Wants analytical tools for monitoring and optimizing table turnover rates, staff performance, and identifying operational inefficiencies for continuous improvement.
- Waitstaff: Wants Advanced analytics on reservation status, waitlist data, and insights into peak times for effective front-of-house management and customer service.
- Diners (Customers): Wants updating reservations and fast service with minimal effort. Wants proof of update to support the realized change. Wants positive dining experience.
- Restaurant Owners: Wants advanced analytics on reservation patterns, customer demographics, revenue trends, and performance metrics to inform strategic decision-making and business growth.
- Development Team: Wants to ensure the analytical dashboard is technically robust, scalable, and capable of handling large volumes of data for in-depth analysis and implement advanced data visualization techniques to present complex analytical insights in an easily understandable and visually appealing manner.

Preconditions: The restaurant manager or waitstaff is logged into the ReserveWell Application.

Success Guarantee (or Postconditions):

 The restaurant manager or waitstaff can view all the reservations and related information in a timely manner.

Main Success Scenario (or Basic Flow): -

- 1. The restaurant manager or waitstaff accesses the reservation display screen by clicking the "Dashboards" button from the home screen.
- 2. The restaurant manager or waitstaff selects a dashboard of interest.
- 3. The system retrieves relevant data from the reservation database and other integrated systems in real-time or near-real-time, considering the default filters if applicable.
- 4. The system translates analyzed data into visually appealing charts, graphs, and other data visualizations for users to view and interpret.
- 5. The restaurant manager or waitstaff exists a specific dashboard view and returns to the dashboards page.
- 6. The restaurant manager or waitstaff exits the dashboard page and returns to the home screen.
- 7. None of the database tables are updated.

Extensions (or Alternative Flows):

*a. At any time, restaurant manager or waitstaff needs to abandon the process:

- 1. Restaurant manager or waitstaff quits the page.
- 2. Restaurant manager or waitstaff is landed on home screen.

*b. At any time, System fails:

There will not be transaction sensitive state changes during this use case, no change will be staged, the system should start according to the last state information.

- 1. Restaurant manager or waitstaff restarts system,
- 2. Restaurant manager or waitstaff logs in,
 - 1-2a. System detects anomalies preventing session:
 - 1. Fail record is sent to support executives for a review and fix.
- 3. Restaurant manager or waitstaff is landed on home screen.
- 4a. Restaurant manager or waitstaff needs to interact with the dashboard.
 - In the dashboards, adjusting parameters, and drilling down into specific details are allowed for users to explore different views and customize their analytical experience based on their interests and requirements.

Special Requirements:

- Role-based access control should be implemented to ensure that different user roles have access to relevant analytical dashboards and features.
- Real-time streaming of data should be supported to provide the most up-to-date insights.
- Scalable system design should be ensured for accommodating an increasing volume of data and users as the restaurant business grows.

Technology and Data Variations List:

- a*. Ensure the app complies with accessibility standards, making it usable by individuals with disabilities.
- b*. The website Is supported by all browsers.
- c*. Ensure that the analytical dashboards are responsive and accessible on various devices, including smartphones and tablets, for on-the-go access.

Frequency of Occurrence: Could be nearly continuous.

Open Issues:

- Plan the provision of user training and support resources to ensure restaurant staff can effectively use the reservation system
- Determine the design details for a clear and user-friendly dashboards page.
- Explore strategies to minimize data latency.
- Determine dashboards' categories and access permissions.
- Ensure compliance with data privacy regulations, especially when dealing with customer data, and addressing potential legal or regulatory challenges.