Assignment 5

Group Members

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Functional requirements

1. **Requirement**: People should be able to register themselves as **“Registered User"** of Website.

- **Input**: The user is prompted to input the user details as per requirement and choose password for their account.
- **Processing**: The system verifies the strength of the password and some other conditions on username. It then proceeds to verify the email provided via OTP mechanism. On verification of email and other required details, it stores the user details in the database.
- **Output**: The user is confirmed as a registered user and its details are saved on a database along with a confirmation email sent to user.

2. **Requirement**: Registered User should be able to authenticate themselves on website.

- **Input**: Any one from username/email/mobile along with password is needed for authentication. Two step verification System, which involve verifying via OTP on every login may be implemented.

- **Process**: The database is queried for the user record which either results in success or failure. Failure in fetching record is either due to wrong password or due to user is not registered on the system. If two step verification is on, a one-time access password is sent to the registered email to confirm authenticity of the user.
- **Output**:
    1. If the user's record is found on database and is correct, then user is redirected to homepage along with profile section being displayed.
    2. If the user's record is found on the database but is not correct, then the user is prompted that their password doesn't match with the record present in the database. Either they can try again to log in or they can change their password.
    3. If the User's record is not found on database, then user is prompted about the same and website may be redirected to sign up page after some delay.

3. **Requirement**: Registered User should be able to change their password.

- **Input**:
    1. Username/email/mobile number along with old and new password will be asked from the user.
    2. Username/email/mobile number along with new password and OTP will be asked from the user.
- **Processing**:
    1. In case one, Database is queried and checked if username matches with old password of user. If details are found to be correct, then the old password is replaced with a new password in the database along with an email regarding password change request is sent to the user.
    2. In case two, an email and message containing OTP is sent to registered email and mobile number of the user. If in case, user

provided correct OTP, then new password is replaced with old password in the database for user and an email regarding same is sent to user.

- **Output**: If the OTP/old password matches, password is successfully changed for the user then user is redirected to login page else it would remain in same page asking for correct details.

4. **Requirement**: Functionality to search Hotels as close to requirements.

- **Input**:
    1. Hotels near user's location of variable kinds are shown to user initially.
    2. A form/search box is prompted where user can choose location of the Hotel.
    3. Some basic filters like Price, Rating, etc. will be available on the UI.
    4. Some advanced filters like "Breakfast Available" or not (some other not so necessary details) will be available under advanced filter section.
- **Processing**: The system does a real-time search of all its affiliated hotels for the customer requirements. It then also runs a search for other unaffiliated hotels for best matches. Query will also be stored on the database for future analysis.
- **Output**: The records which match the required parameters and filters applied are presented as widget outputs along with the option to book them.

5. **Requirement**: Functionality to search Flights.

- **Input**:
    1. User is initially provided details flight of some popular source and destination near user's location.

2. A form/search box is prompted where user can choose source and destination of the hotel along with departure date.
3. Some basic filters will be available upfront on the UI like Price range, one/two side ticket etc.
4. Other filters may be available under the advance filter section on the UI.

- **Processing**:
  1. The user location is detected by the system using GPS. The user is also given an option at a later stage to change this location.
  2. Based on search query and filters applied, database is searched for relevant result.
  3. Also search query along with other information is saved on the database for later analysis.
- **Output**: The records which match the required parameters and filters applied are presented as widget outputs along with the option to book them.

6. **Requirement**: Booking confirmation page

- **Input**:
  1. User is asked to confirm the selected hotel/flight.
- **Processing**:
  1. The user is led to the signup/login page if they aren’t signed in.
  2. Then the user is redirected to payment gateway which is an integrated system provided by some third party like RazorPay or PayPal.
  3. In case the Payment got accepted, it will get reflected in database and details of flight/hotel reservation will be sent to user via email and message.

- **Output:**
    1. If payment is accepted, then confirmation along with details will be prompted on the screen.
    2. In case the payment got rejected, the reason for failure along with the option to make payment again will be shown.

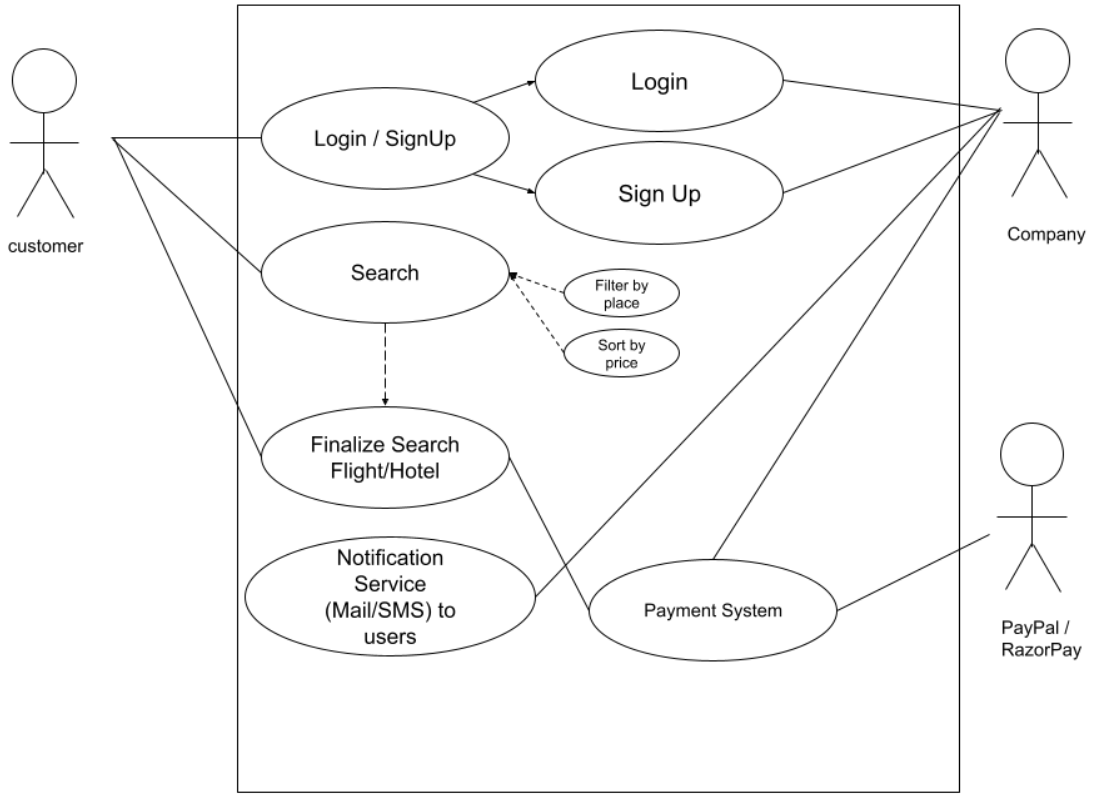
7. **Requirement:** Every user should have a dashboard which provides a single point of access for all the essential information and options available.

- **Input:**
    1. List of all booked flights and hotels along with their details.
    2. Cancellation option for any flight and hotel
    3. History of past ticket/hotels booked along with option to delete such history.
    4. A customer support chat bot which can answer short queries
    5. Contact details of Manual Customer support and records of all past complaints/grievances with their result/solution.
    6. Option to change password and other profile details
- **Processing**:
    1. All currently booked flights and hotels will be fetched from the database and shown to the user.
    2. In case of cancellation, the record will be moved to cancelled flights/hotels and the process of giving payment following some previously defined rule will be initialized.
    3. History of booked hotels/flights cancelled hotels/flights along with their return payment status will be brought from database and shown to user.
    4. In case the user opts to delete their history, their history will be deleted in the dashboard, and it will not be further shown. History will

be deleted from the database after a certain time as per the company’s policy.

5. Customer chat bot can use predefined query or can use AI technology to interact with customer. Rather than designing it on our own, a third-party customer support system can be integrated into the website.
6. Details of all past complaints along with their complete description will be present on the UI.
7. In case the user wants to change its details, then the user must verify itself with Identification mechanism with an OTP sent to user’s email and mobile number which will be verified.

- **Output:**
    1. In case of cancellation, an email is sent to the user along with corresponding entry will be moved to cancelled ticket/hotels section.
    2. In case of history deletion, page will be reloaded, and corresponding history will not be shown again.
    3. In case of profile update, updated profile will be shown to user.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