

Functional Requirements

1. Registration

- 1.1. The system shall allow the user to register for a new account.
 - 1.1.1. The system shall require the user to provide a name and valid email address
 - 1.1.2. The system shall require the user to choose and enter a password for his/her account
 - 1.1.3. The system shall contact the user by email to confirm that registration is complete
- 1.2. Logging in
 - 1.2.1. The system shall require the user to log in using their registered email address and password in order to use the facilities offered by Travpedia via the website

2. User Account

- 2.1. The system shall allow the user to view his/her account details
- 2.2. The system shall allow the user to amend his/her account details
- 2.3. The system shall allow the user to save payment information in his/her account
- 2.4. The system shall allow the user to save mailing preference information in his/her account

3. Search

- 3.1. The system shall allow a user to search for products using a combination of one or more criteria
 - 3.1.1. The system shall allow the user to search by type of product
 - 3.1.2. The system shall allow the user to search for accommodation products by location
 - 3.1.3. The system shall allow the user to search for travel products by point of departure and/or destination
 - 3.1.4. The system shall allow the user to search by specifying a target price range
 - 3.1.5. The system shall allow the user to search for accommodation and/or package holidays by specifying a start date and an end date
 - 3.1.6. The system shall allow the user to search for travel by specifying a start date and, optionally, a return date
 - 3.1.7. The system shall allow the user to specify the number of rooms required

- 3.2. The system shall enable the user to filter search results
 - 3.2.1. The system shall enable the user to filter results by price range
 - 3.2.2. The system shall enable the user to filter accommodation results by star rating
- 3.3. The system shall enable the user to sort search results
 - 3.3.1. The system shall enable the user to sort results by price
 - 3.3.2. The system shall enable the user to sort results by review score
 - 3.3.3. The system shall enable the user to sort accommodation results by star rating
 - 3.3.4. The system shall enable the user to sort travel results by departure time
- 4. Make a new booking
 - 4.1. The system shall allow the user to make a new accommodation booking
 - 4.2. The system shall allow the user to make a new travel booking
 - 4.3. The system shall allow the user to make a new package holiday booking
 - 4.4. The system shall allow the user combine one or more products into a single booking
- 5. View or cancel an existing booking
 - 5.1. The system shall allow the user to view an existing booking
 - 5.2. The system shall allow the user to cancel a booking
- 6. Make a payment
 - 6.1. The system shall allow the user to make a payment by either or both of the following
 - 6.1.1. The system shall allow the user to pay by credit/debit card
 - 6.1.2. The system shall allow the user to pay by Travpedia voucher
 - 6.2. The system shall send the user an email to their registered email address confirming details of the completed payment.

Non-Functional Requirements

Product Requirements

- 1. Efficiency
 - 1.1. The system shall respond to a search request in under 10 seconds

- 1.2. The system shall respond to a user login request within 3 seconds
 - 1.3. The system shall send all confirmation emails within 2 minutes.
 - 1.4. The system be capable of handling 1 million simultaneous users during peak time.
2. Dependability
 - 2.1. The system shall be available 24/7 for 99% of the time. (Availability)
 - 2.2. The system shall require users to confirm all booking and payment transactions before executing to mitigate against user error (Error-tolerance)
 - 2.3. The system will operate a mirror server - the principal and mirror servers will be located at geographically separate locations in the UK.
 - 2.4. The system will provide a further database server in the USA in order to facilitate disaster recovery.
3. Usability
 - 3.1. The system shall be easy to use (as evidenced by 80% positive feedback from 'usability' questions on user satisfaction questionnaires).
 - 3.2. The system shall provide the user with context specific help.
4. Security
 - 4.1. The system should block user access after 5 consecutive failed login attempts
 - 4.2. The system shall secure and encrypt all financial transactions passed to the third party consortium using 128-bit SSL certificates
 - 4.3. The system shall secure and encrypt all user data passed to the Global Distribution System (GDS) using 128-bit SSL certificates

Organisational Requirements

1. Development
 - 1.1. The system shall operate on all major web browsers e.g. Internet Explorer, Firefox, Chrome, Safari
 - 1.2. The system shall operate on both desktop and mobile platforms
2. Standards
 - 2.1. The system shall conform with all requirements laid down in the company's ISO 9001:2008 Quality Management Procedures

External Requirements

1. Interoperability
 - 1.1. The system shall integrate with the GDS in order to ensure correct processing of user bookings
 - 1.2. The system shall correctly integrate with the third party consortium that handles payments
2. Legislative & Ethical
 - 2.1. The system shall comply with the Payment Card Industry Data Security Standards (PCI DSS)
 - 2.2. The system shall comply with all requirements of the UK Data Protection Act 2003.
 - 2.3. The system shall comply with level AA of the Web Content Accessibility Guidelines.