

Hi-Fi Design Portfolio Description

Introduction:

This tourism website prototype designed for Leicester's escape rooms aims to provide enthusiasts and newcomers alike with a streamlined platform for discovering and booking the most satisfying escape room experiences in the city. The motivation behind this system is to address the growing interest in escape room activities by offering a comprehensive tool that simplifies the process of finding and engaging with these experiences.

The key user requirements include the ability to filter rooms based on age suitability, difficulty level, distance, price, and popularity, empowering users to tailor their search to specific preferences as well as an interactive map to display locations of various escape rooms. Additionally, users can manage their interaction with the platform through features like escape room virtual tours, room bookings, leaving reviews, and updating profile information, as well as adding and removing rooms to and from their wish list, ensuring a personalized and efficient user experience.

Prototype Functionality:

1. Common Function: User Authentication (Login/Sign-up)

- Justification: User authentication is fundamental for personalizing user experiences, enabling secure access to features like booking, wish lists, and reviews. It establishes user identity and facilitates profile management.

2. Unique Feature: Virtual Tour of Escape Rooms

- Justification: The virtual tour provides a unique selling point, enhancing the platform's value proposition by offering a firsthand preview of escape rooms, improving user satisfaction and conversion rates.

Development Task List:

- User Authentication (Login/Sign-up)
- Virtual Tour of Escape Rooms

Additional Common Functions:

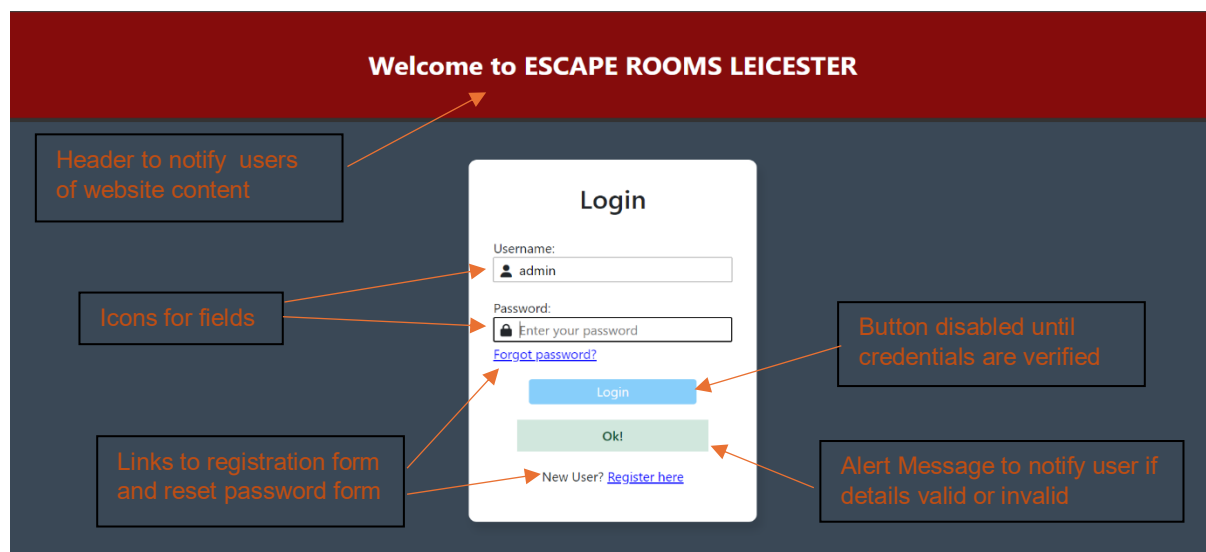
- Sorting and Filtering: Implement sorting options (by distance, price, popularity) and filtering by age and difficulty using JavaScript and frontend UI components.
- Escape Room Booking: Develop booking features allowing users to reserve desired escape rooms.
- Wishlist Management: Enable users to add, remove, and manage favourite escape rooms within their profiles.
- Updating Profile Information: Implement profile editing functionalities for users to update personal details and profile pictures.
- Leaving Reviews: Integrate review submission and display functionalities to capture user feedback and ratings for escape rooms.

Background Technologies:

Most of the prototype was developed using vanilla CSS and Javascript, however the following external technologies were utilised in development:

- **Bootstrap:** Bootstrap, a widely used CSS framework, played a crucial role in enhancing the functionality and design of the escape room website prototype. By leveraging Bootstrap's features, the prototype streamlined the display of pre-styled alert messages and created responsive web interface components. The `alert` component classes provided by Bootstrap (e.g., `alert-success`, `alert-danger`) were utilized to showcase notifications to users in a visually consistent and appealing manner, ensuring cohesive styling across the website. This approach allowed for rapid development of user interface elements with ready-made styles, minimizing the need for custom CSS and improving the overall user experience.
- **Font Awesome:** Font Awesome's icons library significantly enriched the visual design and usability of the prototype. Font Awesome icons were seamlessly integrated into the project via a CDN link (`all.min.css`), providing easy access to a diverse range of scalable vector icons. These icons were strategically incorporated throughout the prototype to enhance the visual representation of various user interface elements, such as navigation menus, buttons, and interactive components. By leveraging Font Awesome's extensive library of icons, the prototype achieved a polished and intuitive interface, improving the overall user experience and making key features more visually appealing and recognizable.
- **Google Maps:** Google Maps was integrated into the prototype to allow users to visualise the locations of various escape rooms in Leicester through the interactive map. Additionally, it was also used to implement the immersive 3D virtual tours of the rooms so users can experience an interactive preview of the room to enhance the decision-making process before booking. The incorporation of Google Maps elevated the appeal and functionality of the website.

Walkthrough:



ESCAPE ROOMS LEICESTER

Part 1 of registration

Register

Email:

Password:

Confirm Password:

Existing User? [Login here](#)

Header

Icons for fields

Alert Message to notify user if invalid email or passwords don't match

Next button disabled until all details valid

Link to login page

ESCAPE ROOMS LEICESTER

Part 2 of registration

Register

Username:

Username already taken!

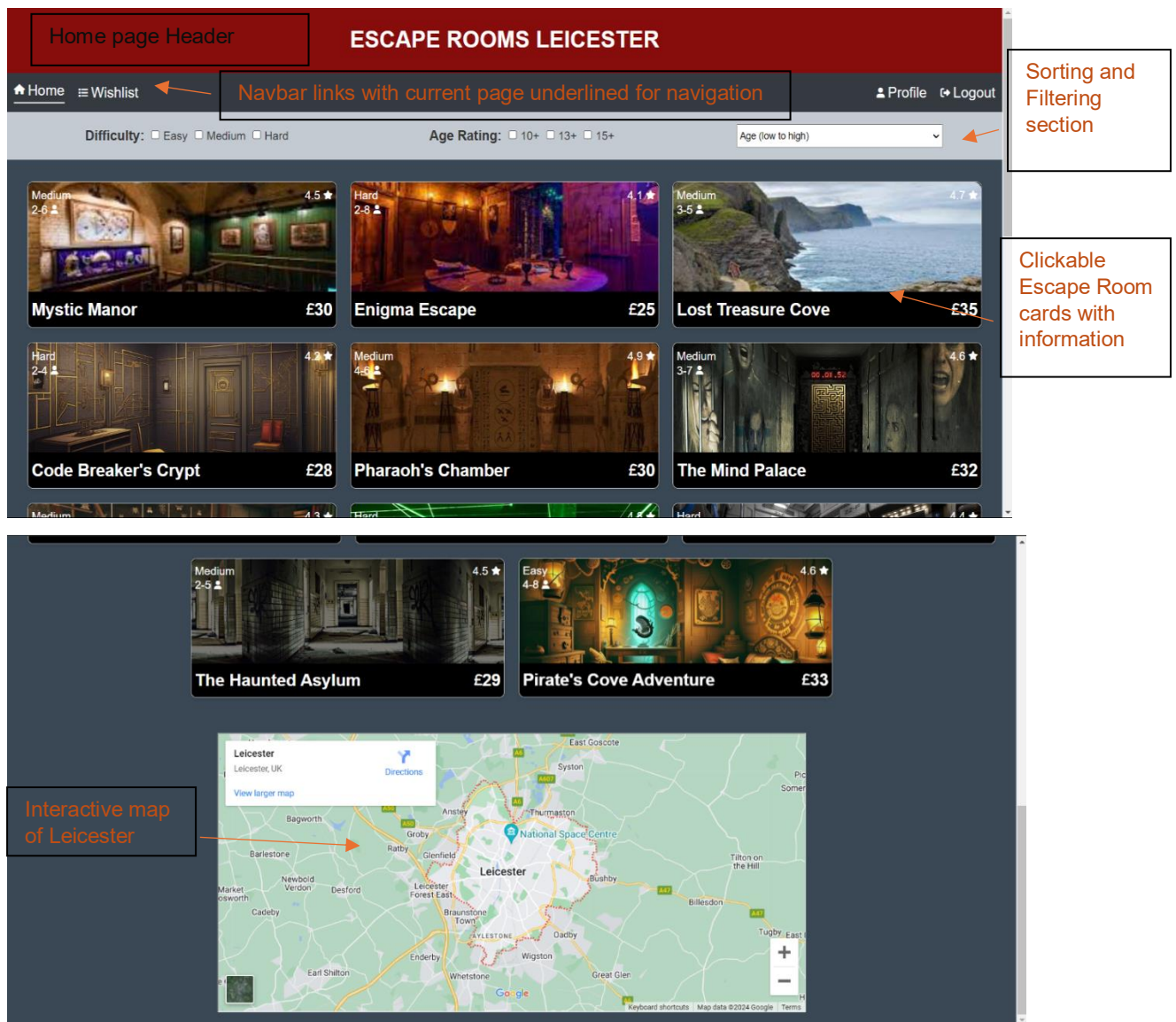
Existing User? [Login here](#)

Back button to change previous details if desired

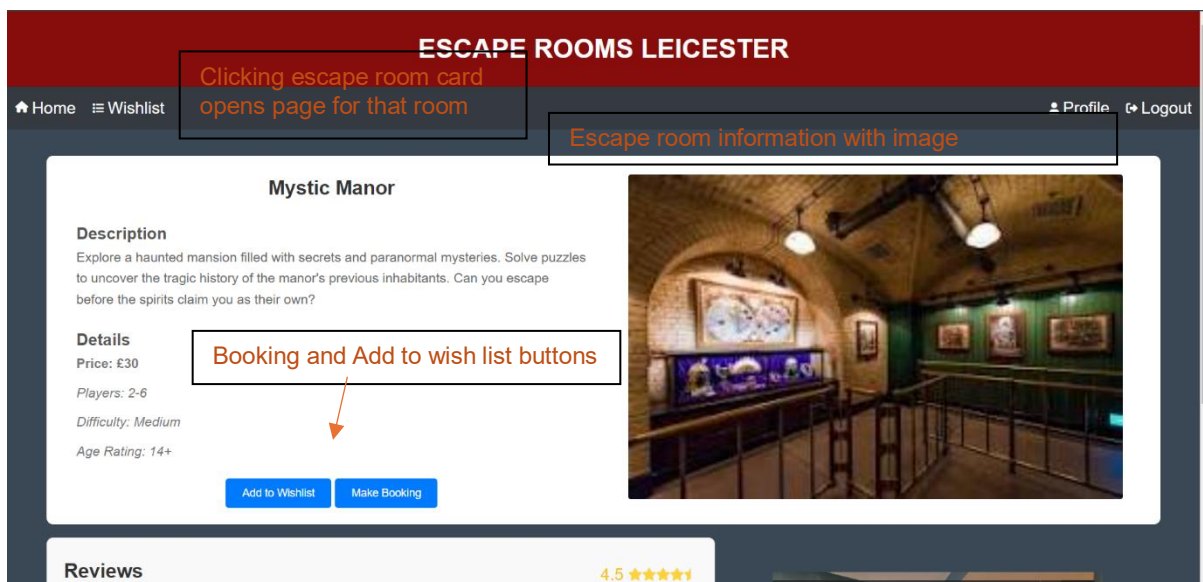
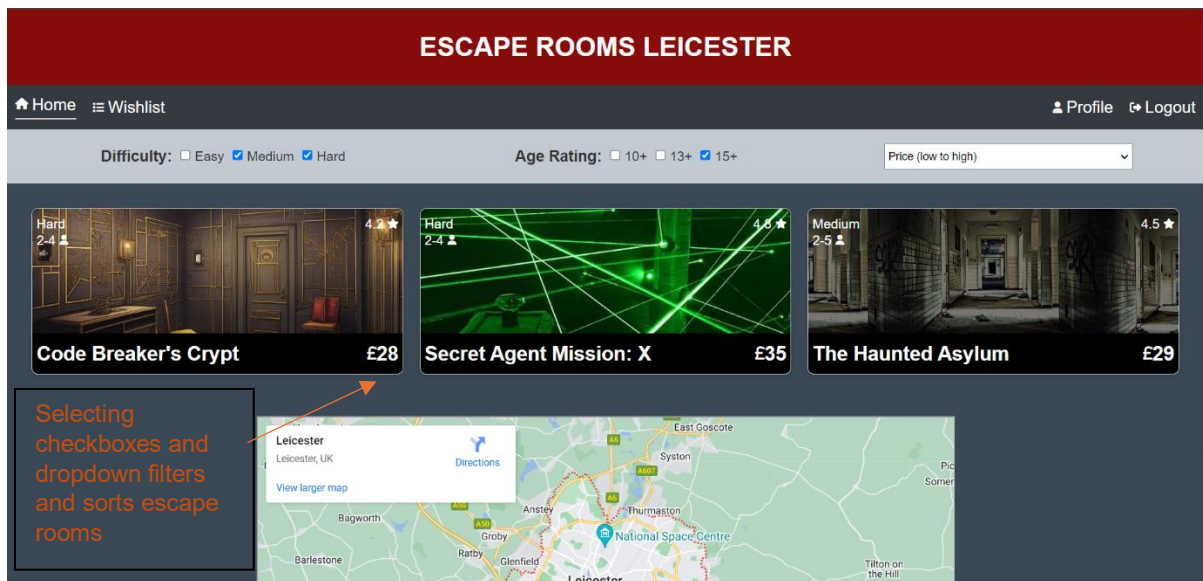
Create Account button disabled until all details valid

Alert Message to notify user if username already exists

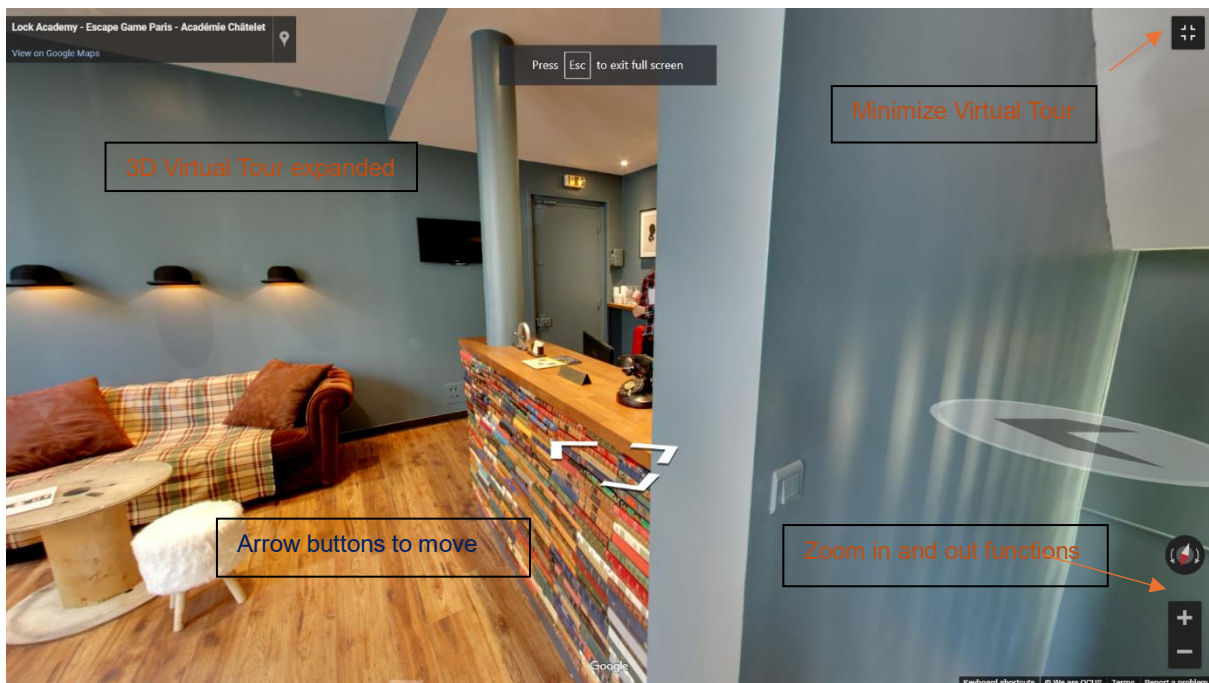
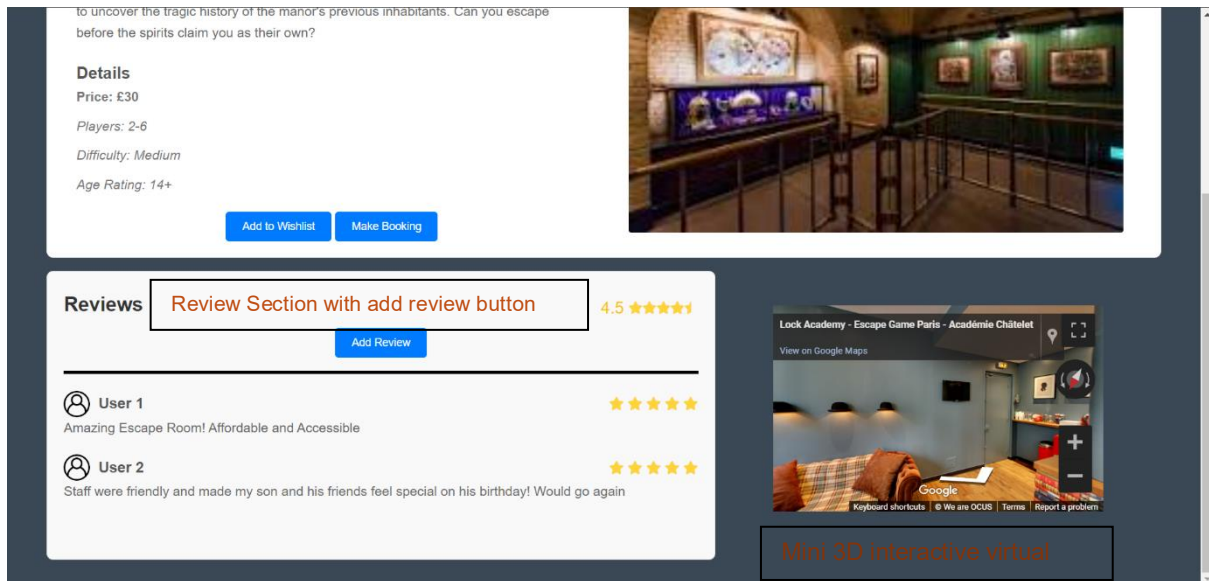
Above are the login and registration pages which allow the users to access the website with a personalised account. Links are clickable to navigate between login and registration pages. There is also a reset password page if the user clicks the forgot password link on the login page. Icons were used to help make the website more accessible to dyslexic people and the alerts are colour coded with informative and clear messages, so the user is notified of any errors or success. Colours chosen for the webapp are colour blind friendly.



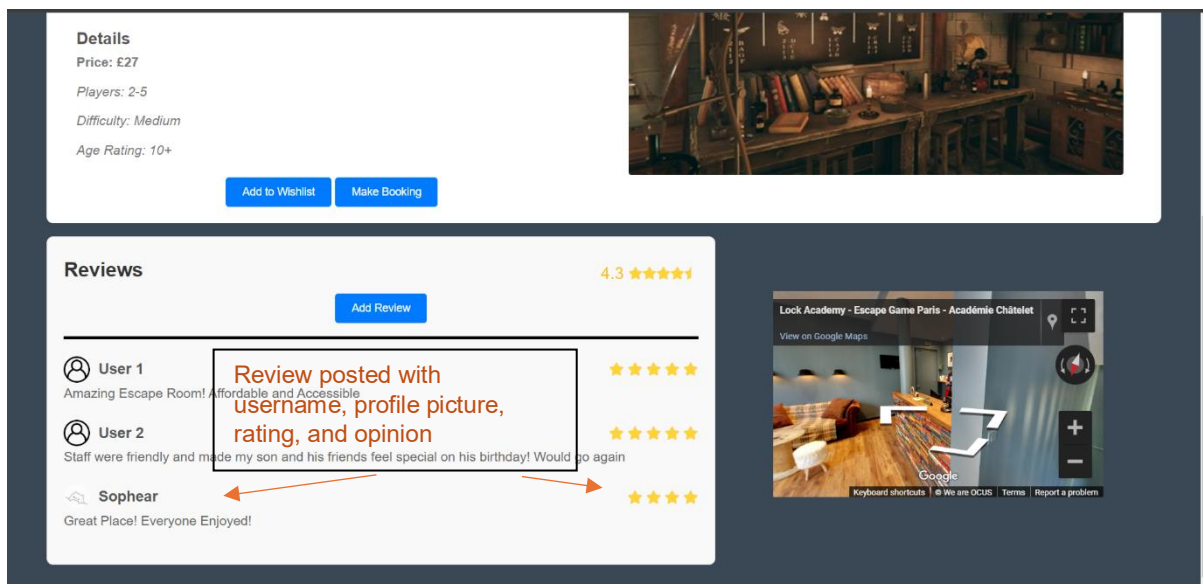
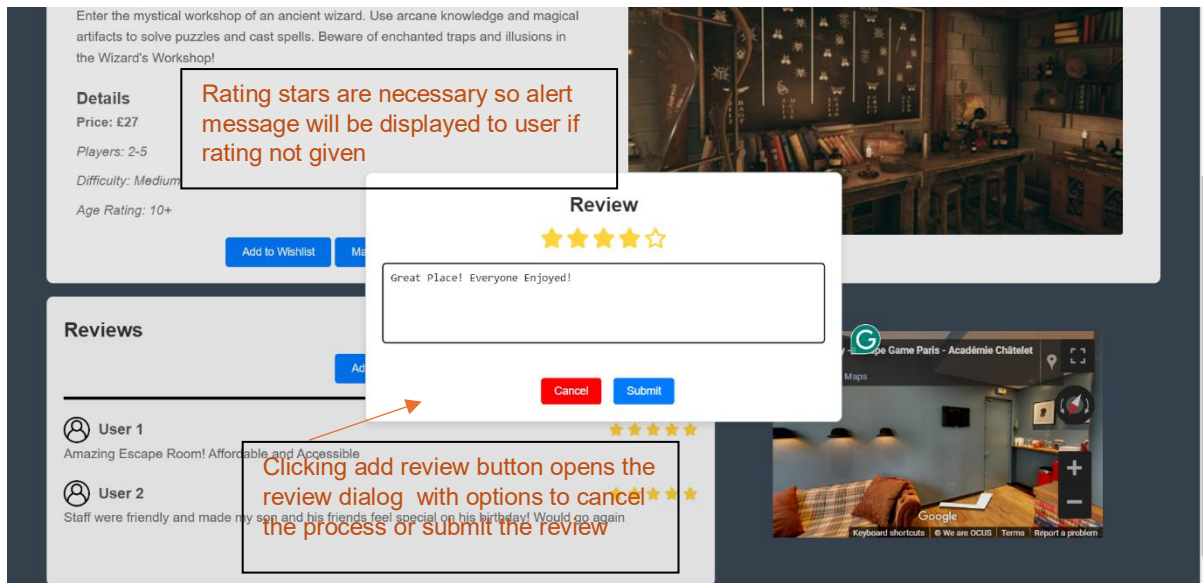
Above is the home page displaying all escape rooms with their information on the banner. Navigation bar can be used to visit the other pages and log out will return the user back to the login page. Users can also filter and sort escape rooms using the checkboxes and dropdown above which will display escape rooms accordingly. Clicking on escape room banner will take user to the page for that specific room. Originally the map was to be on the right hand side but it has been positioned at the bottom for visual appeal as aspect ratio is better. Colours chosen are colourblind friendly and the checkboxes have a big area of selection to cater to people with Parkinson's. Navbar contains icons to assist people with dyslexia and aid in navigation. Images on the home page as well as the map also have alternate text for improved accessibility.



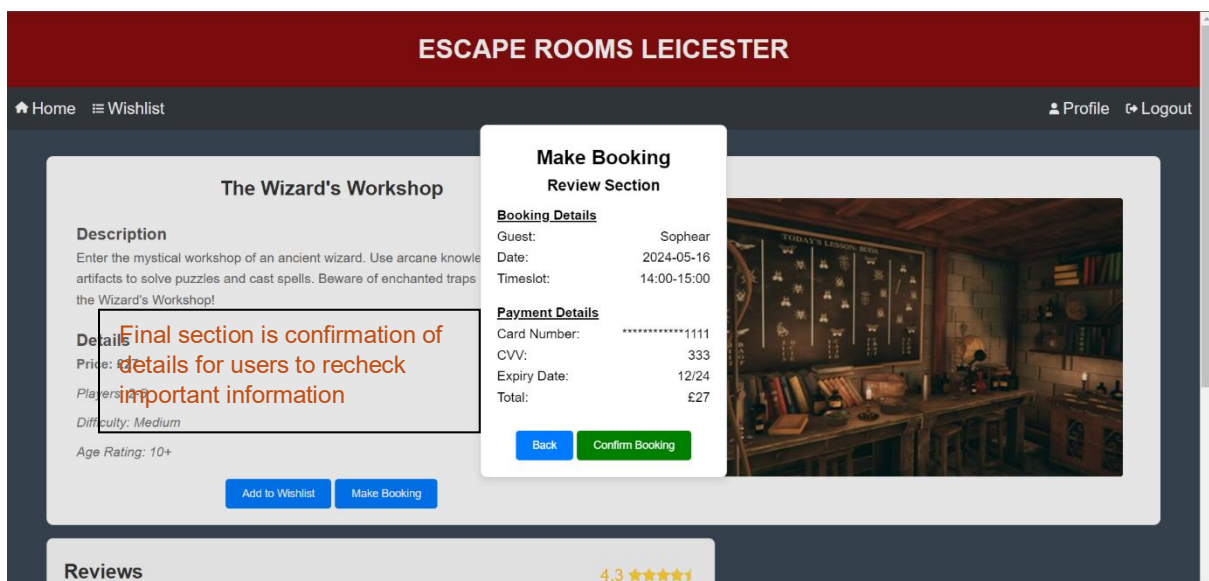
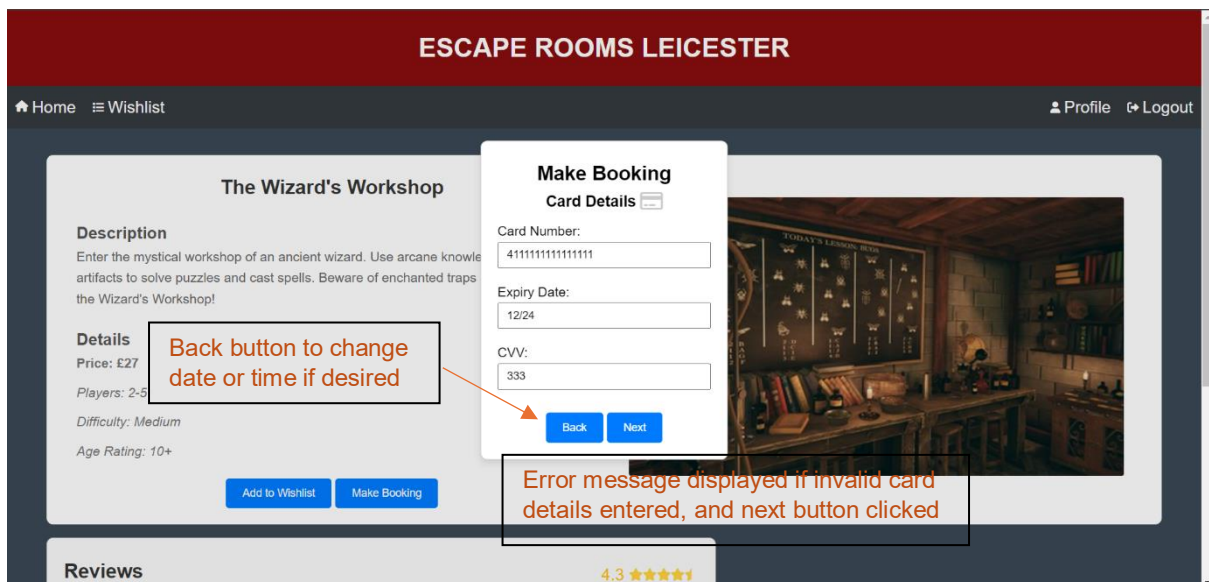
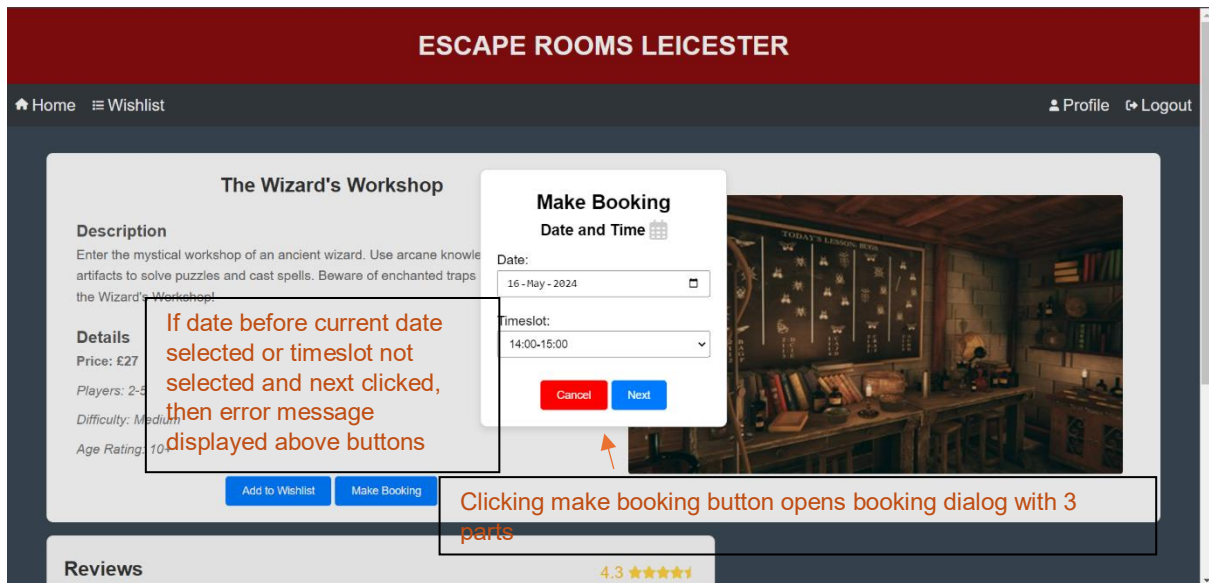
Clicking an escape room will redirect user to the escape room page as above. This consists of a navbar to go to other pages, escape room information section, review section and a mini virtual tour section. Listed out important information in a list for more clarity. Users can also leave reviews by clicking add review button. 3D tour is interactive and can be maximised. Buttons are big and alternate text is provided for images and the virtual tour for improved accessibility.

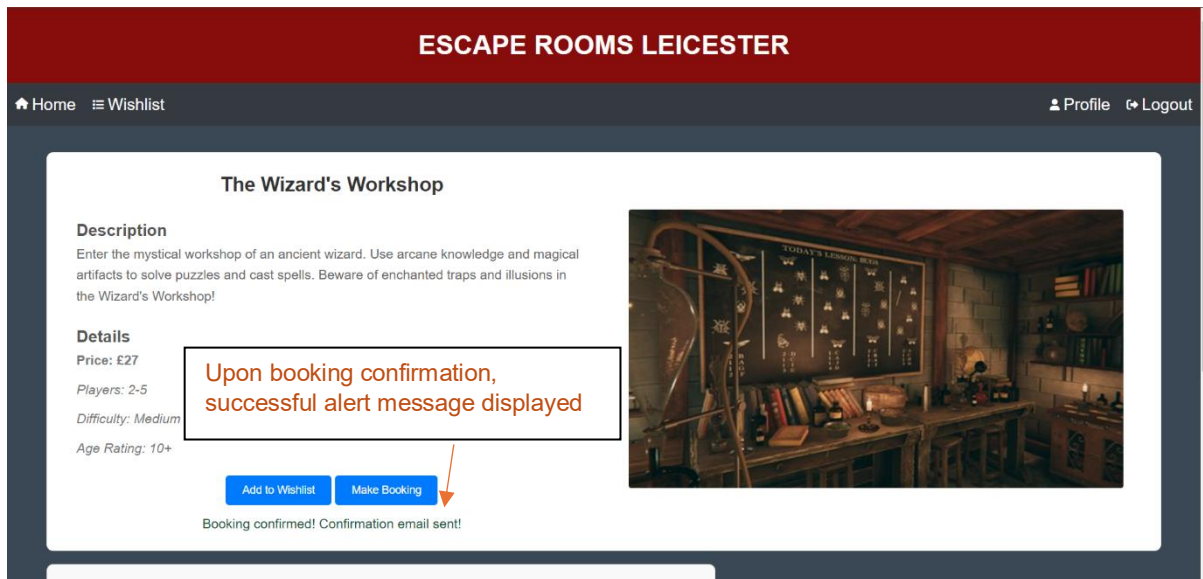


The maximised virtual tour as shown above consists of arrow buttons to move around and explore as well as zooming functionality. Users can also minimize to go back.



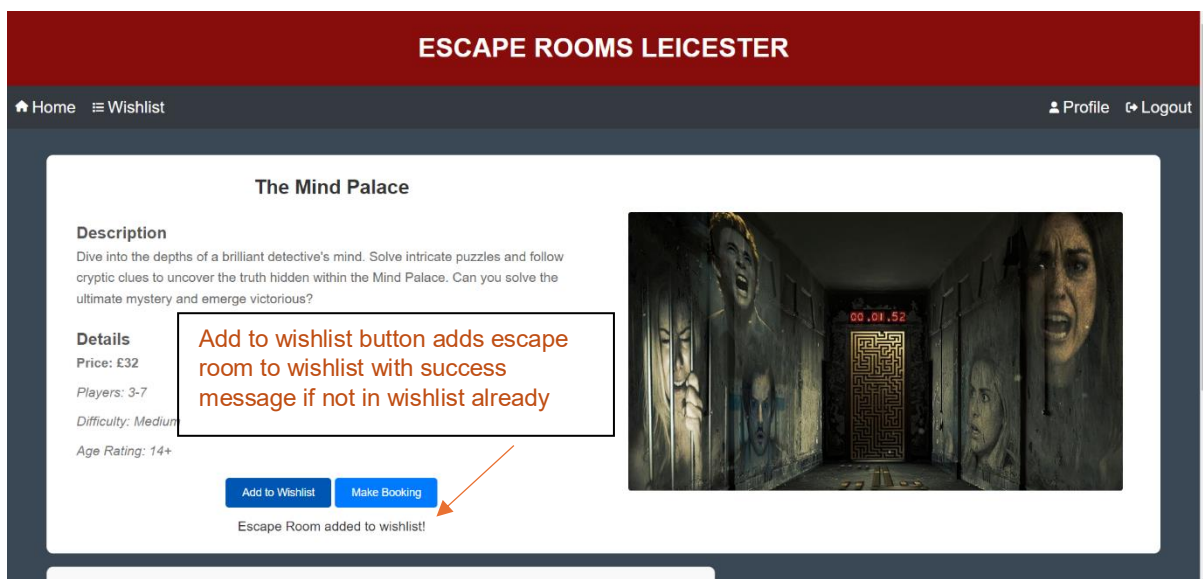
Clicking the add review button opens review dialog for user to leave review. Submit and cancel buttons are contrasting colours to allow users to distinguish difference. Rating is given by selecting the stars – clicking 4th star gives rating of 4 stars. Comment is optional but rating in stars is mandatory when leaving a review and users will be prompted for rating if stars not selected. Once submitted the user can see their review.

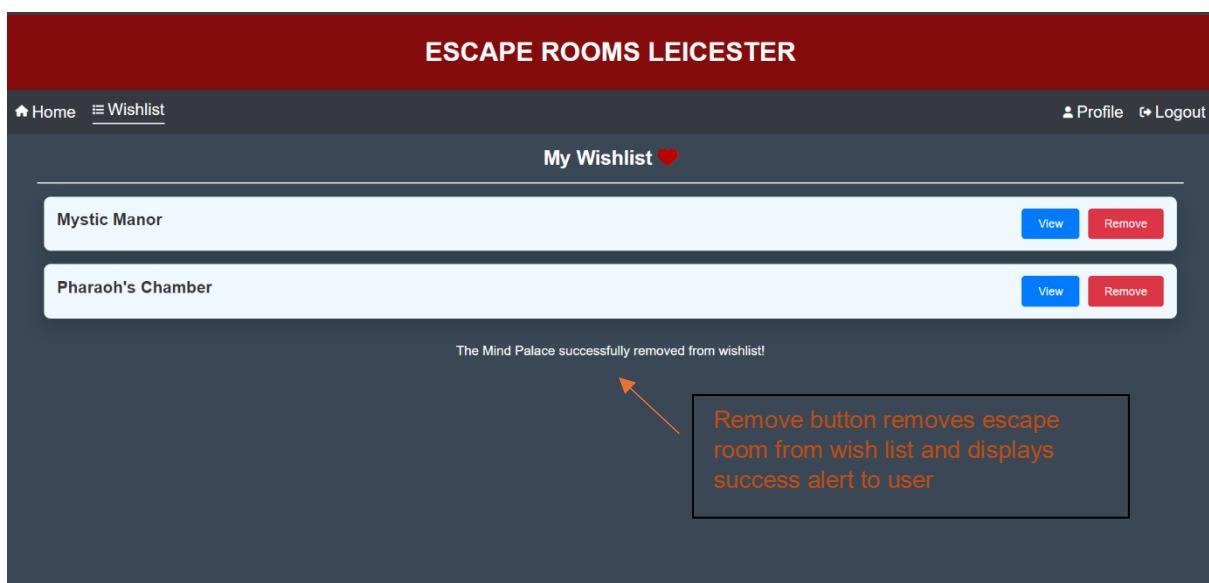
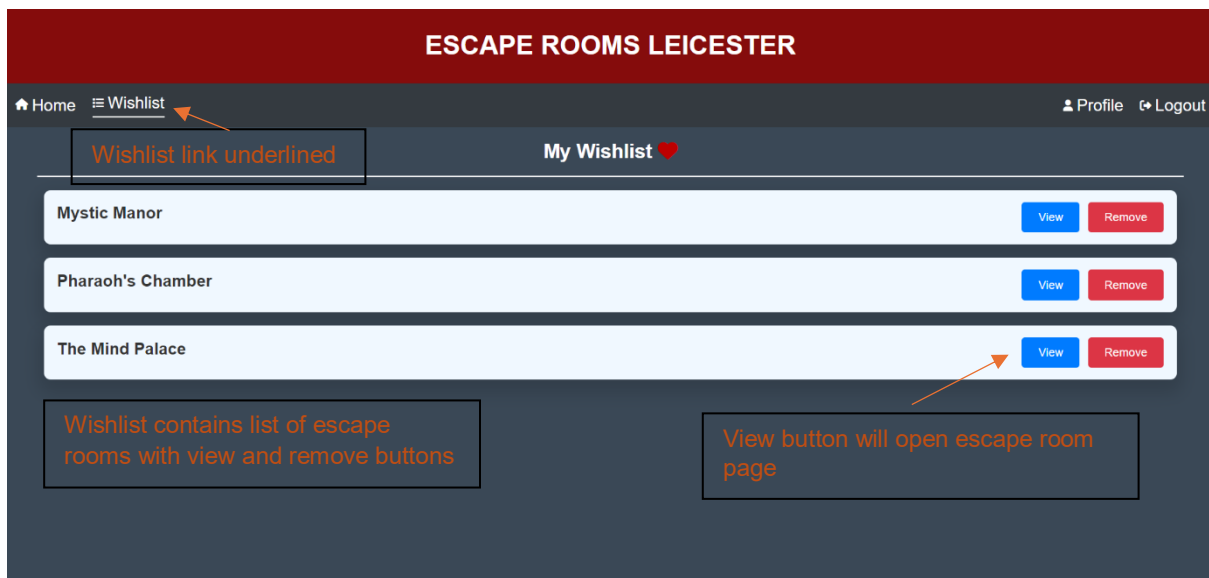
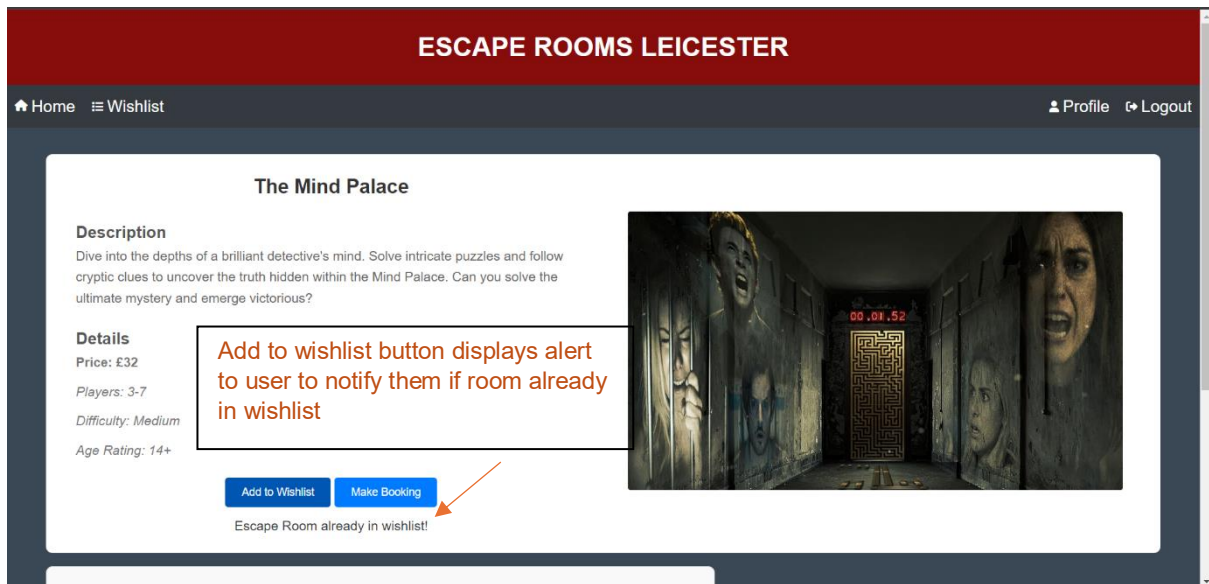


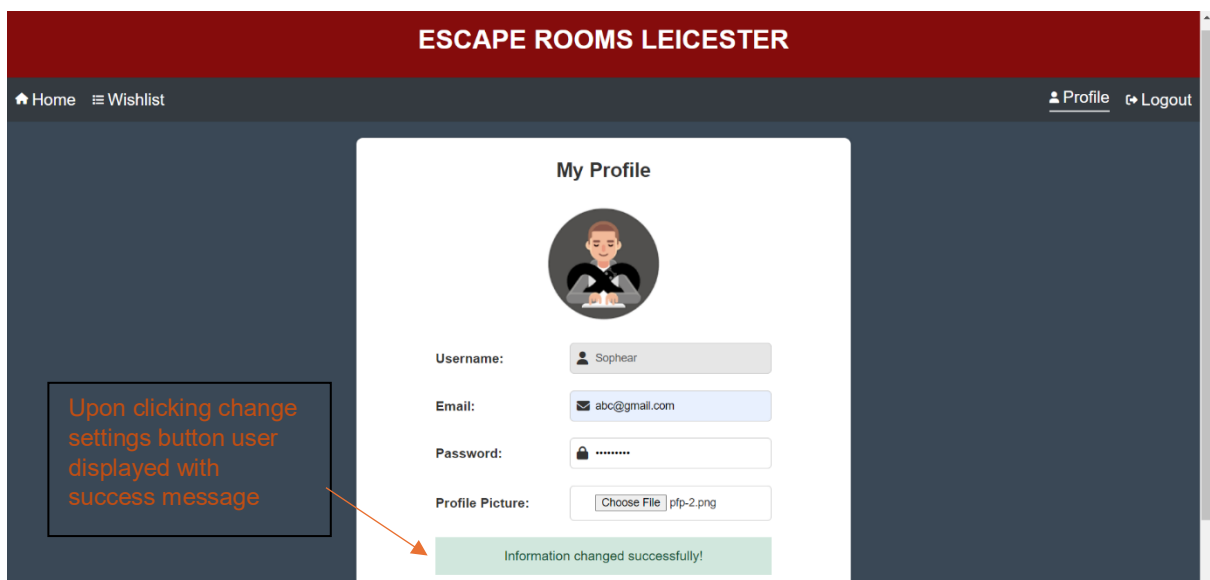
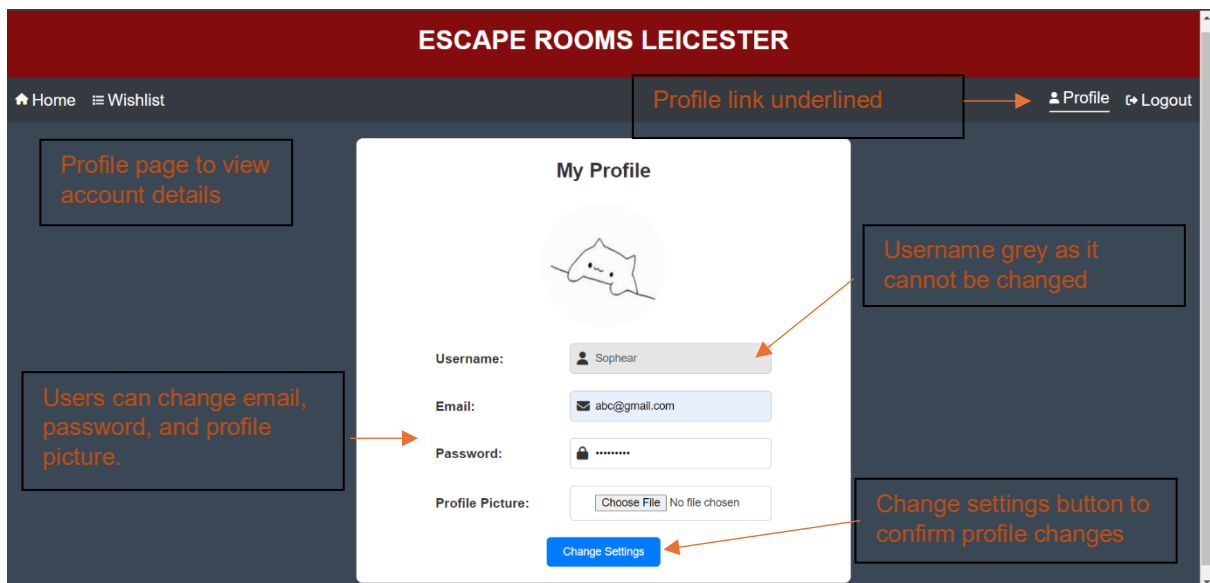


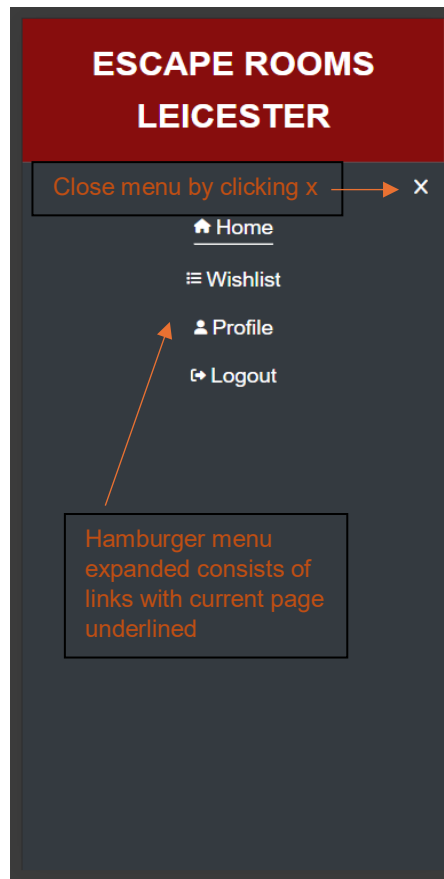
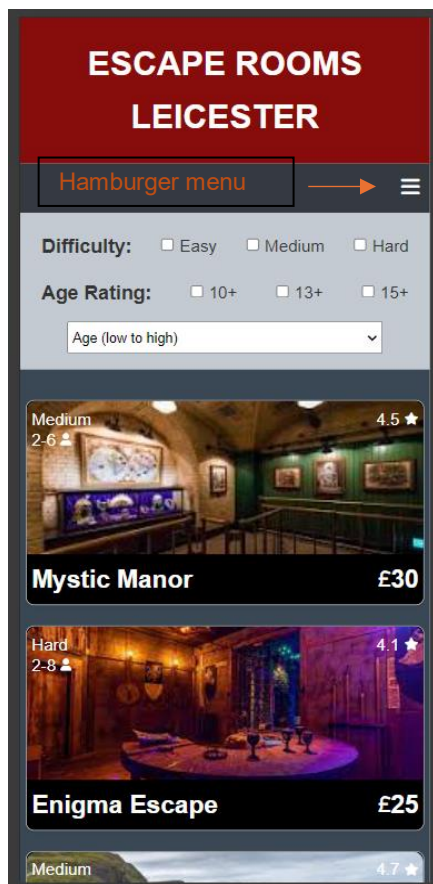
Above is the booking process – users can click make booking to create booking. This pops up a dialog to book which has 3 sections. First is the date and time – validation added so date before current day cannot be selected, and that time is selected. Random timeslots disabled every time a date is selected to show that that time is unavailable. The card details section also has validation for correct card details – it uses checksum to validate card and makes sure the expiry date is a valid date. CVV also checked to make sure 3 numbers entered. Invalid input results in alert messages corresponding the error for each section. The final booking section allows users to review details and upon confirmation success message shown.

Cancel button in red and confirm button in green to distinguish difference those and the regular transition buttons. Icons added to the top of each section to assist in accessibility for dyslexic people.









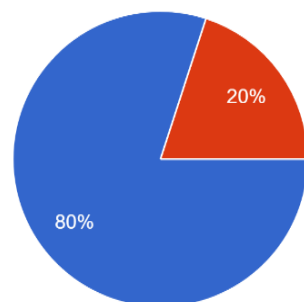
Above is the home screen on a mobile layout displaying the navbar compressed into a hamburger menu. The prototype is developed so that it is responsive on all devices improving web accessibility for those without access to computers.

Heuristic Evaluation and Usability Testing Results:

Heuristic Evaluation and Feedback:

1. Visibility of System Status How clear and understandable are indicators of system status (e.g., loading, error messages) throughout the website?

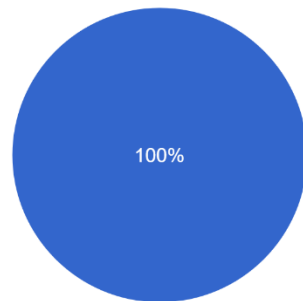
5 responses



- No issues; status indicators are clear and informative.
- Minor issues; status indicators are sometimes unclear or ambiguous.
- Moderate issues; status indicators are often confusing or inconsistent.
- Major issues; it's frequently unclear what's happening with the system.
- Catastrophic issues; system status indicators are completely unusable or...

2. Match Between System and the Real World How well do the language and design elements on the website align with real-world concepts and your expectations?

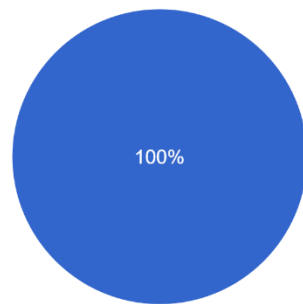
5 responses



- No issues; everything feels familiar and intuitive.
- Minor issues; some language or design elements are confusing.
- Moderate issues; many aspects feel unfamiliar or don't make sense.
- Major issues; the language and design often clash with real-world understand...
- Catastrophic issues; the website feels completely disconnected from real-world

3. User Control and Freedom How easy is it to navigate, undo actions, or recover from mistakes on the website?

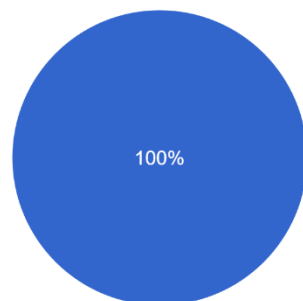
5 responses



- No issues; navigation and control are intuitive and straightforward.
- Minor issues; navigation can be slightly confusing or restrictive.
- Moderate issues; navigating and controlling actions often feel cumber...
- Major issues; it's difficult to navigate or control actions effectively.
- Catastrophic issues; navigation and control are practically unusable.

4. Consistency and Standards How consistent is the design, layout, and behavior of elements across different pages or sections of the website?

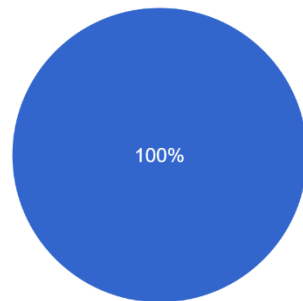
5 responses



- No issues; the design is consistent and predictable throughout.
- Minor issues; some inconsistencies are noticeable but manageable.
- Moderate issues; inconsistencies frequently disrupt the user experience.
- Major issues; the lack of consistency significantly impacts usability.
- Catastrophic issues; the website lacks any semblance of design consistency.

5. Error Prevention How effective is the website in guiding you to avoid making mistakes, such as providing clear instructions or error prevention mechanisms?

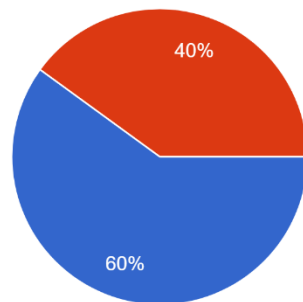
5 responses



- No issues; error prevention measures are effective and well-implemented.
- Minor issues; some areas could benefit from improved error guidance.
- Moderate issues; error prevention is inconsistent or insufficient.
- Major issues; it's challenging to avoid mistakes due to unclear guidance.
- Catastrophic issues; the website lacks any meaningful error prevention.

6. Recognition Rather Than Recall How well does the website assist you in recognizing options and actions without requiring excessive memorization?

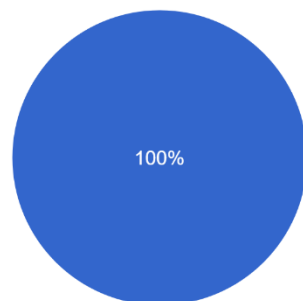
5 responses



- No issues; options and actions are readily apparent without needing to re...
- Minor issues; some areas require more effort to recognize options or actions.
- Moderate issues; there's often a need to remember specific details or steps.
- Major issues; recognizing options or actions is consistently challenging.
- Catastrophic issues; the website requires extensive memorization to us...

7. Flexibility and Efficiency of Use Once you're familiar with the website, how efficiently can you perform tasks and achieve your goals?

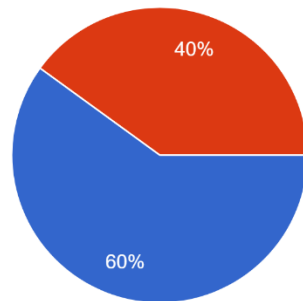
5 responses



- No issues; tasks are performed efficiently with minimal effort.
- Minor issues; some tasks require more steps or effort than expected.
- Moderate issues; task efficiency is often hindered by usability barriers.
- Major issues; it's difficult to achieve tasks efficiently due to usability challe...
- Catastrophic issues; task efficiency is severely impacted to the point of impr...

8. Aesthetic and Minimalist Design How visually appealing and clutter-free is the design of the website?

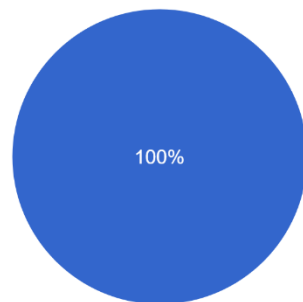
5 responses



- No issues; the design is visually pleasing and free from unnecessary clutter.
- Minor issues; some areas could benefit from improved aesthetics or reduced clutter.
- Moderate issues; visual design elements often feel overwhelming or distracting.
- Major issues; the visual clutter significantly detracts from the user experience.
- Catastrophic issues; the website design is chaotic and visually unbearable.

9. Help Users Recognize, Diagnose, and Recover from Errors How well does the website assist you in understanding and recovering from errors or issues encountered?

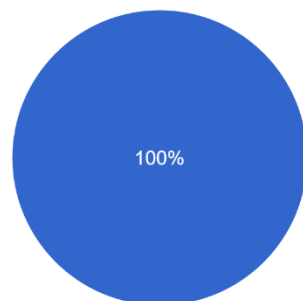
5 responses



- No issues; error messages and recovery options are clear and effective.
- Minor issues; error messages could be more informative or helpful.
- Moderate issues; error diagnosis and recovery are often challenging.
- Major issues; error handling is inadequate and frustrating.
- Catastrophic issues; error recovery is practically nonexistent.

10. Help and Documentation How easily can you find helpful information, instructions, or support resources when needed on the website?

5 responses



- No issues; help and documentation are easily accessible and comprehensive.
- Minor issues; some areas could improve in terms of help availability or clarity.
- Moderate issues; finding relevant help or documentation can be challenging.
- Major issues; help resources are insufficient or difficult to locate.
- Catastrophic issues; accessing help or documentation is practically impossible.

What did you like about the design?

5 responses

The simplicity, there's no unnecessary information. The colour contrast is good, everything is very easy to read.

I liked how the website was laid out and it was easy to use.

there is a consistent design throughout, which was very clear and easy to use. there was no unnecessary additions.

Simple and easy to use, clearly labelled which made navigating the website very quick and efficient

I liked the colour scheme and the fact that you could see a glimpse of the escape room in the home page

What aspects of the design need improvement?

5 responses

The design is a bit too simple, could use some images or graphics to make it look overall more interesting.

The five stars gave seven stars

i think the design works very well. perhaps the title could be adjusted as it's quite simple?

Maybe add a little more in terms of aesthetics to draw in customers however it didn't impede the ability to use the website as everything was clearly marked

I think it would've better if when you put the cursor on the image, an option would come up at the bottom to add to wish list or a quick book.

Any additional comments or suggestions.

4 responses

The website is really easy to navigate, and feels logical to use. The profile especially is easy to make changes to. The filtering is also really clear with plenty of options to filter with.

Really liked!

the website works very well and efficiently. it is very easy to navigate.

n/a

Usability Testing Results:

Users were given 7 tasks to complete:

1. Login/Sign Up
2. Filtering and Selecting Escape Room
3. Doing a Virtual Tour of Escape Room
4. Making a Booking
5. Leaving a Review
6. Adding and Removing Escape Rooms from Wishlist
7. Updating Profile Information

Users were able to complete all tasks successfully however with one user there was a bug when leaving a review – selecting 5 stars rendered 7 stars in the review section.

Users found most of the site quite intuitive and could easily navigate between pages and interact with website.

During the virtual tour tasks, 3/5 users were unaware about where the virtual tour was located on the escape room page and took longer to do the task.

During the updating profile task, 4/5 users tried changing their username which could not be changed.

Feedback and Discussion:

Majority of users tested found the layout quite minimalistic with no unnecessary element and effectively laid out for efficient and logical navigation. The colour scheme was said to have good contrast and the website was consistent throughout with helpful labels.

However, users found that the design of the website was too simplistic, and improvements were to improve aesthetics using captivating graphics. I feel that since the website was done in solid colours, I could add texture to make it more aesthetically appealing to users.

The results from the usability test signify that the virtual tour was quite ambiguous, and users weren't aware of where it was. Hence, it could be improved by adding a separate section with the virtual tour and a button or link with an alert displaying "click here for a virtual tour of the escape room". As for the username in the profile section, it has been greyed out so that users don't try to change it. However, since users were still confused about their ability to change it, it can be greyed out using a darker shade of grey.

Conclusion:

Overall, based on the result of the test and feedback gathered, the escape room prototype developed successfully allowed users to do a variety of tasks and highlighted the positive aspects such as minimalistic layout, effective navigation, good colour contrast and minimal issues. In order to progress this into being the starting point for final development, current usability issues need to be amended such as by making the virtual tour feature more prominent, darkening the username input for more clarity that it cannot be changed and improving the aesthetics by using textured backgrounds for a more visually interesting interface.