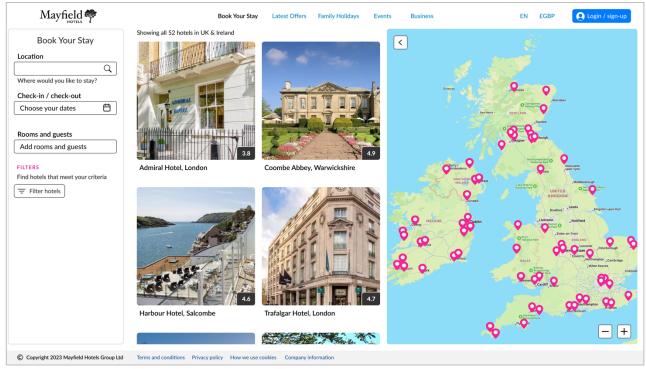
Project 11: Prototype for desktop

Hotel booking website

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A screenshot of the first screen of the prototype

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Introduction

This project builds on the flow diagram and screen sketches of the concept phase.

The solution is a medium fidelity prototype built in Figma. A link is provided at the end, together with a user test scenario.

In producing the prototype, I had to re-address a number of UX problems which were not apparent in the initial concept.

A series of smaller iterations in the design process were carried out as a result of informal user testing with the prototype. This is not documented here, but helped to create a more refined solution.

Before presenting the prototype, I summarise below some assumptions, cover brief technical notes and give attribution to third party sources used in the design.

Assumptions

Business model

I have taken the business model assumptions of the hotel, defined in the concept projects, and further refined them here.

Some of these assumptions are quite high level decisions. Whilst they could potentially be influenced by UX research, I feel they need to be defined as part of the business model in order to set some scope.

Different hotel brands appeal to different markets and the user's mental model may vary according to the user context. For example, should breakfast be treated as a room rate or an extra? This may fall down to the business model, whether the hotel offers a proper holiday stay, thus a room rate, or budget accommodation, thus an extra. The business model affects decisions for flow and micro actions, so I feel it needs to be defined.

There is also scoping to keep focus on a simple user flow within the main booking process.

Business assumptions

- The websites is for a single hotel chain, operating under one brand, with multiple locations
- The market is mid-tier, ie not budget nor high-end luxury, eg catering to consumer holidays, short-stay breaks and business

- The flow should not require the user to login or sign-up
- Multiple rooms of different types are available for selection
- There are two room rates: standard with no cancellation, and a flexible rate which offers free cancellation
- Breakfast is provided as an optional component of the room rate. Breakfast is one product, there are no tiers such as continental or full breakfast
- It should be possible to add extras
- Personal information and a credit card payment is required up front to secure the booking

Other assumptions

Flow

The booking flow should keep to the following main convention: Search > Hotel overview > Room options > Extras > Checkout > Confirmation

Form interactivity

Given the limitations of Figma, form fields are not always interactive. In particular:

- Text entry fields. Figma is unable to simulate interactivity for text entry fields to a high level of fidelity. Therefore clicking within a form field to auto-populate it is regarded as sufficient
- The final checkout screen, which contains a number of text entry fields, is not fully interactive. In the prototype, a single click onto the form will auto-populate all of its fields

UX findings beyond the flow

There were some findings from the research and analysis which are not fully addressed within the prototype as they are complementary to, rather than necessary to the booking process. These are content design questions such as what to show in image galleries, or the importance of user reviews. Consideration of these elements does inform the UX, but you can only see parts of them to the extent to where they are relevant to the main booking flow. A solution would be to develop the prototype to support more user flows, but this is beyond the scope of this project.

Technical notes

Some of these points will be elaborated more fully in the annotations project, but I summarise briefly some technical aspects to be aware of when viewing the prototype.

Desktop experience

Screen resolution

I have designed the layout assuming a minimum screen size of $1200 \times 675 \text{ px}$ (16:9 aspect ratio); the resolution of a small laptop. The prototype is set to screen width of 1500 px; this is somewhere between the minimum, and 1920 px, an average HD desktop monitor.

Considerations for touch interaction

As a desktop solution, the prototype assumes interaction with a keyboard and mouse. However, as some laptops offer touch screens, and some larger tablets such as the iPad Pro offer a desktop-class experience, I have not precluded the ability to use touch, or for its need to be responsive.

I began by designing minimum button sizes at 44 x 44px, a broad industry guide for touchscreen devices, but this restricted how much I could fit onto a smaller screen, and the advantages of a desktop canvas afforded by the precision of a mouse pointer began to whittle away.

Therefore, given that this is a desktop first experience, I regard the mouse as the primary pointing device, and I have designed many of the buttons and links at a minimum of 32 x 32px. This still allows for touch, but in a real scenario it may be worth considering making UI adaptions for touch if this were a context that needed broad support.

Limitations to the simulation

Interactivity

Figma provides visual hinting for buttons that segue to the next screen state. To avoid confusion, visual interactivity on button states, such as hover and active, are not simulated, as in my experience, these can misdirect the user where hinting is required.

As for similar reasons above, interactivity of any controllable element is limited to only those that offers a segue to the next state in the flow. Figma offers a higher tier version that adds support for conditional logic. This could allow for a more interactive, but I have chosen to scope the functionality of my solution to features available on the free tier as of the time of writing.

Latency

Website performance is a UX consideration, but Figma does not simulate latency very well.

I have simulated slow response times for a couple of key states where I would expect there to be more than a 2 second delay. This allows me to design a progress overlay component. I am aware though that latency could happen at any point in the flow, and I am not able to simulate this more accurately.

On loading main screen states in a live application, we could also employ use of skeleton states, but this cannot be accurately simulated within Figma.

Attributions

The prototype includes a number of third-party elements to illustrate the designs.

I have made use of icons from the following Figma component libraries:

Lets Icons, Untitled UI Icons and Bootstrap 5 UI Kit

I have sourced additional icons from a few different websites including: flaticon.com, freepik.com, pngtree.com and thenounproject.com

Images have been borrowed from various websites as found on a Google search including hotel brands **Hilton** and **Radisson** amongst others.

Map images were adapted from screenshots of Apple Maps.

The prototype

The prototype imagines a fictional hotel chain called **Mayfield Hotels**, a small to medium sized hotel that operates throughout Ireland and the UK.



The flow represents the "happy path" for a user of the main hotel booking process. No error states are shown, these will be documented in the annotations project.

The scenario for the prototype is moderately complex. This was devised in order to help define the best navigational structures and design patterns for my solution.

User test scenario

- You are going on a family holiday to London
- You plan to arrive on 23 November, and leave on 11 December
- You want one room for two adults and two children (ages 5, 12)
- You want a second room with wheelchair access for another adult
- The hotel must have a car park
- You would like the largest family room available
- You want free cancellation
- You would like breakfast included

Link

The prototype is hosted on Figma. Click on the link below to view:

timth.uk/uxdi-prototype