Project 9: Interaction design for desktop

Hotel booking website

Tim Thompson
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Introduction

This project conceptualises my solution for the hotel booking process in wireframe sketches of computer screens. It covers the flow from hotel search through to booking confirmation.

However, I could not address this without first defining a number of assumptions that shape some fundamental decisions. I break these down below.

Screenshots of the hand drawn sketches follow at the end.

Assumptions

Business model

This design builds on the initial assumption defined in the flow diagram, primarily that this is a hotel chain with sites on multiple locations, rather than a single site hotel; thus the user journey begins with a hotel location search.

The concept assumes a number of other business parameters that influence the solution. This list is not exhaustive, but these include:

- the group operates under one brand
- login allows for access to member prices
- breakfast is optional
- cancellation is possible
- multiple rooms of different types are available per site
- optional extras can be booked
- payment is required up front

Technical definitions

I set out a working definition “designing for desktop” that I have used as a basis for these sketches.

Responsivity and breakpoints

A typical website is designed using a responsive approach, where the UI adapts according to screen size and type of device. Devices are generally classified along a spectrum from mobile and tablet through to laptop and desktop. Thresholds, called breakpoints, are commonly defined in development to cater for each class of device.

In this project, responsivity has been taken into consideration for the designs, but the breakpoint for laptop computers and above is treated as the baseline for the desktop concept. This design will assume a minimum screen width of 1200pt, and a 16:9 aspect ratio for the visible area[1]. A large tablet held in horizontal orientation could potentially fall into this catchment as well.

A technical determination such as this is used only as a guide; the sketches are not precisely measured to this resolution, but it gives some indication of what elements can be positioned on the screen and where.

Desktop first

A common approach to responsive design is “mobile first”; this prioritises the UX for the smallest mobile breakpoint, before making adaptions for larger screen devices. However, this can lead to the UX for desktops becoming a secondary consideration.

This design is desktop first; it assumes that the user is not bound by the constraints of the small screen or handheld ergonomics, and considers UX primarily from a desktop perspective.

Although consideration is made for the possibility of touch interaction, it is assumed that the user will interact using a keyboard and mouse or trackpad.

Other flows

This solution focuses on a single user flow, the primary booking process from homepage through to confirmation. Websites however may be optimised for a number of key workflows, and it is hard to ignore these when conceptualising a solution.

[1] This is the equivalent of the XL breakpoint defined by the Bootstrap front-end framework v5

For example, these could include flows for logged-in users / members, which may show past searches, promotional prices or smarter defaults, or flows for amending or cancelling a booking.

Limited consideration has been given to alternative user flows, but they are not explicitly addressed.

More broadly, a hotel website may need to support a number of high level flows via elements such as global navigation, homepage promotions and footer. These are represented generically in the design using common design patterns, but are not the focus of this solution.

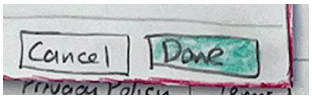
Sketches

Explanatory notes

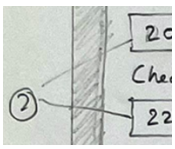
The sketches for the main screen states are:

1. Homepage
2. Search results
3. Hotel information
4. Room options
5. Room extras
6. Booking form
7. Booking confirmation

Limited colour is used to highlight major focal points; submit buttons are highlighted green for progression through major steps; and modal windows, or notable changes in screen state, are shown with a pink border to aid the viewer:

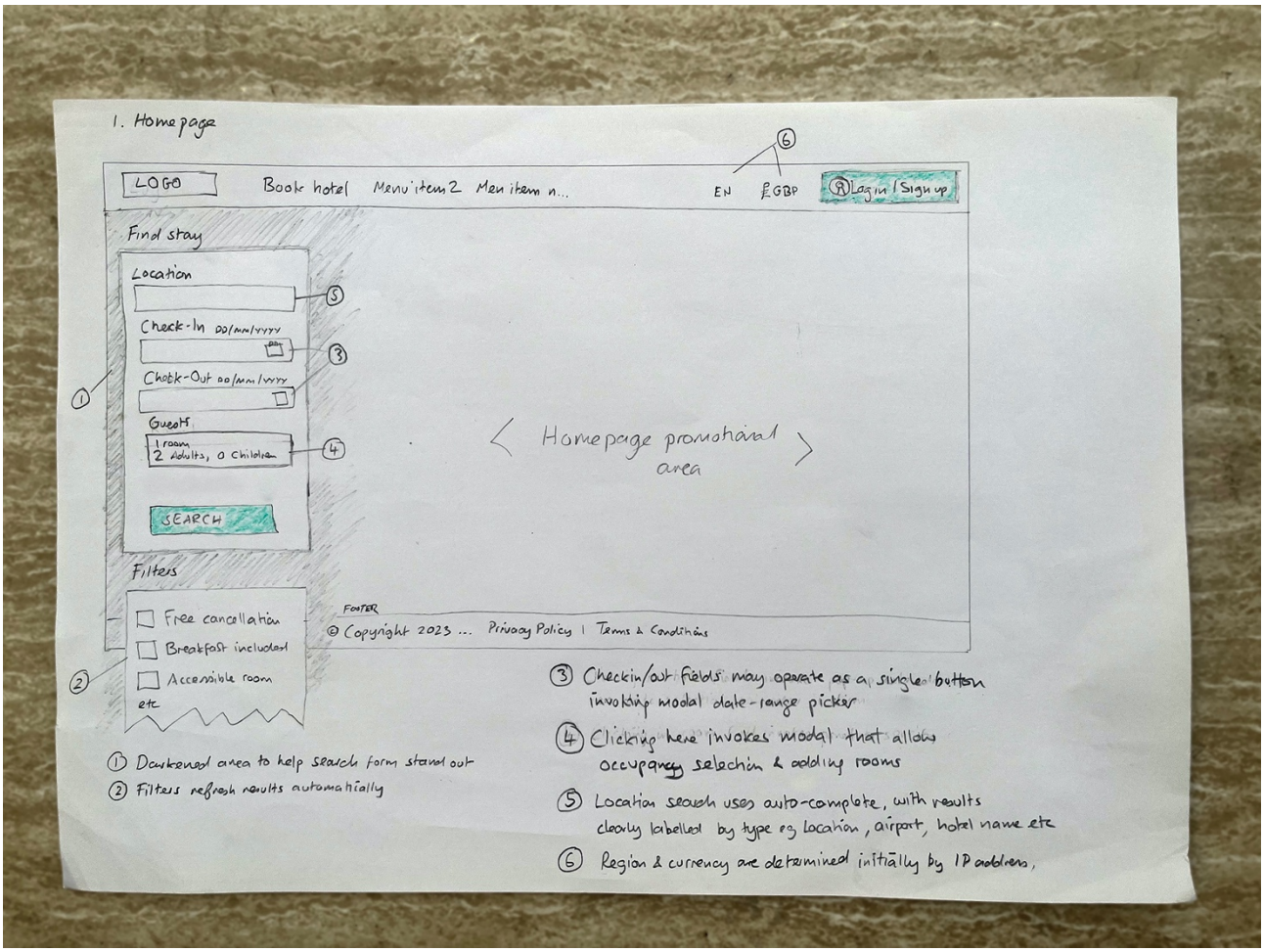


Call-outs are used to explain key functionality or behaviour:



Each diagram is supported with a brief summary of how it addresses the research & analysis. Some include a retrospective of what I might do differently on further iterations, or doubts in my thinking, and how I might address these.

1 Homepage



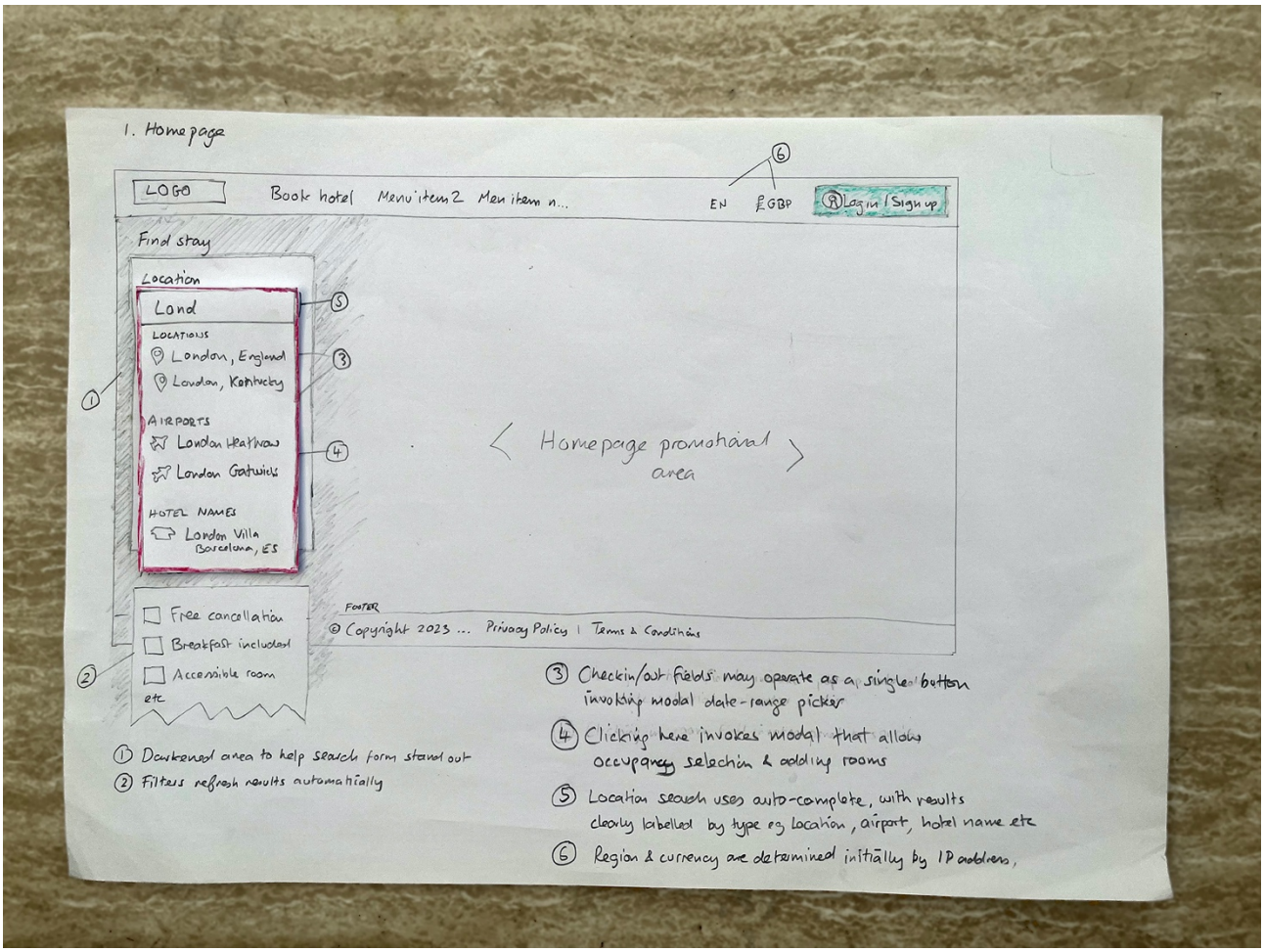
Addressing research & analysis

- Columnar-based flow, with search and filters shown together on left. This exposes key user goals such as free cancellation or inclusion of breakfast and allows them to be linked visually to the initial search.

Retrospective thoughts

- Placing the search panel on the left breaks with convention on many popular hotel websites. I might wish to consider user testing on a prototype before committing to this approach.

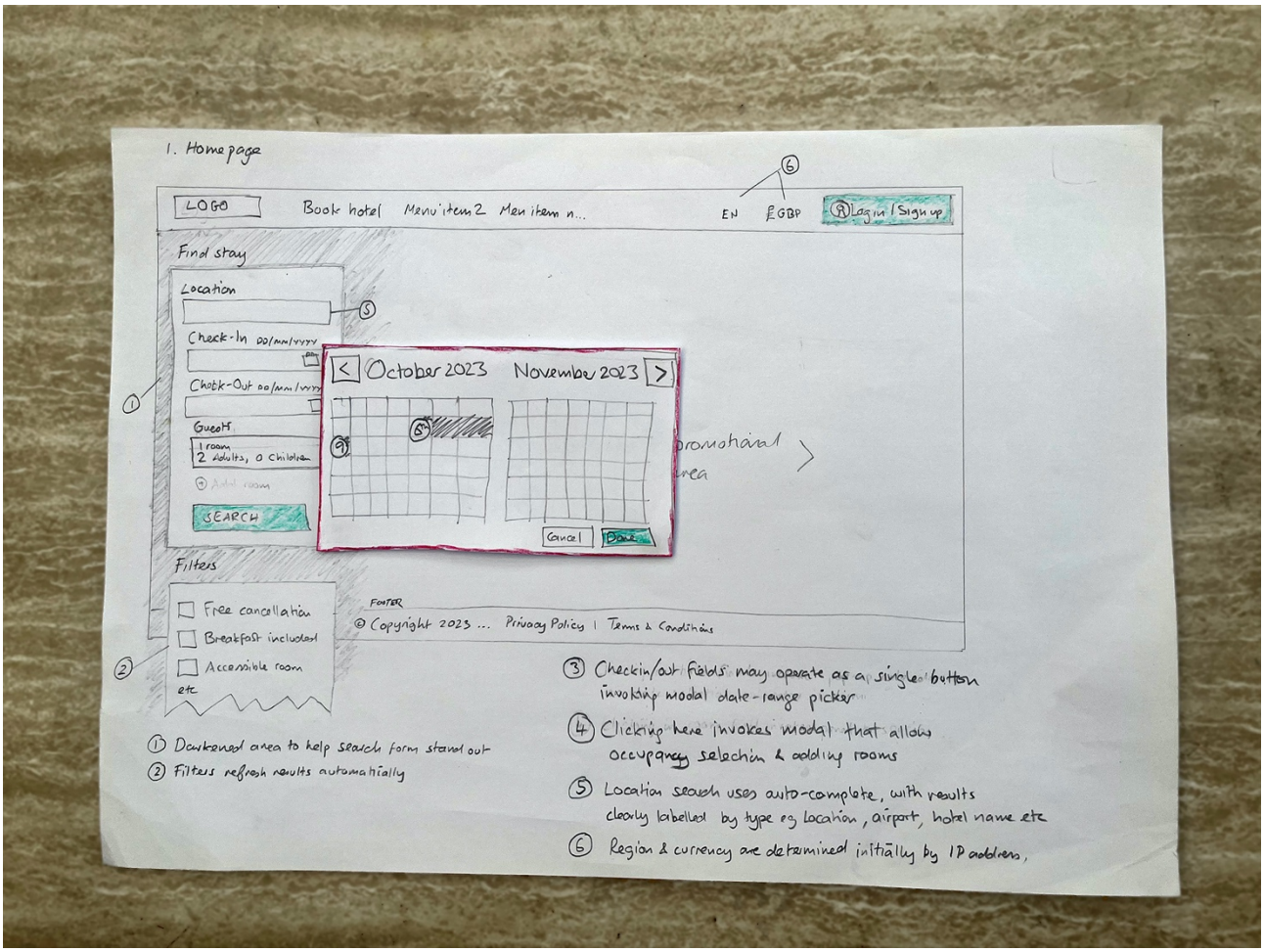
1b Homepage – location search with auto-complete



Addressing research & analysis

- Autocomplete field separates suggestions by type, with intention to reduce user confusion where for example a hotel name is confused with geographical location. Types are grouped by sub-title and icon.

1c Homepage – check-in / check-out date selection



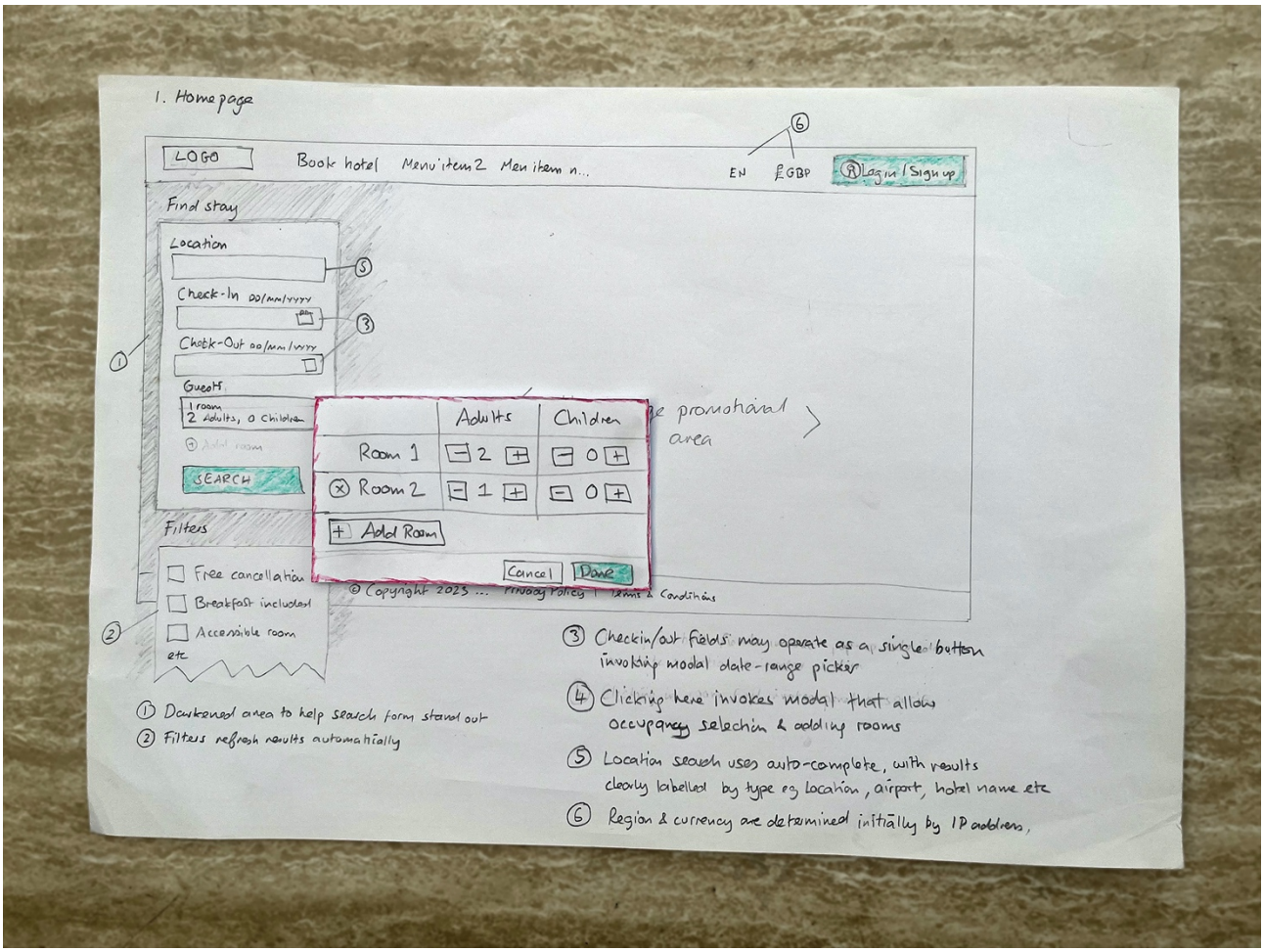
Addressing research & analysis

- Modal window appears on selection of check-in/out date inputs. A date-range selection component is used to select both dates, and highlight the range, in a single action. A ‘Done’ button is required to prompt users to confirm selection and dismiss the window. ‘Cancel’ allows the user to dismiss the window with no changes.

Retrospective thoughts

- I was looking at ways to address user confusion on date-range selection; this can be quite fiddly. Originally I contemplated separate date input fields for check-in and check-out, as sketched. Whilst I played with ideas, I felt the visual impact of showing a date range would be lost. As noted in comment 3, I now envisage these fields to function as a single button to invoke the date range selector.
- By not automatically dismissing the component on selection and allowing the user to confirm their choice with a ‘Done’ button, I am hoping this may mitigate some user confusion, and would be a point of observation for prototype testing.

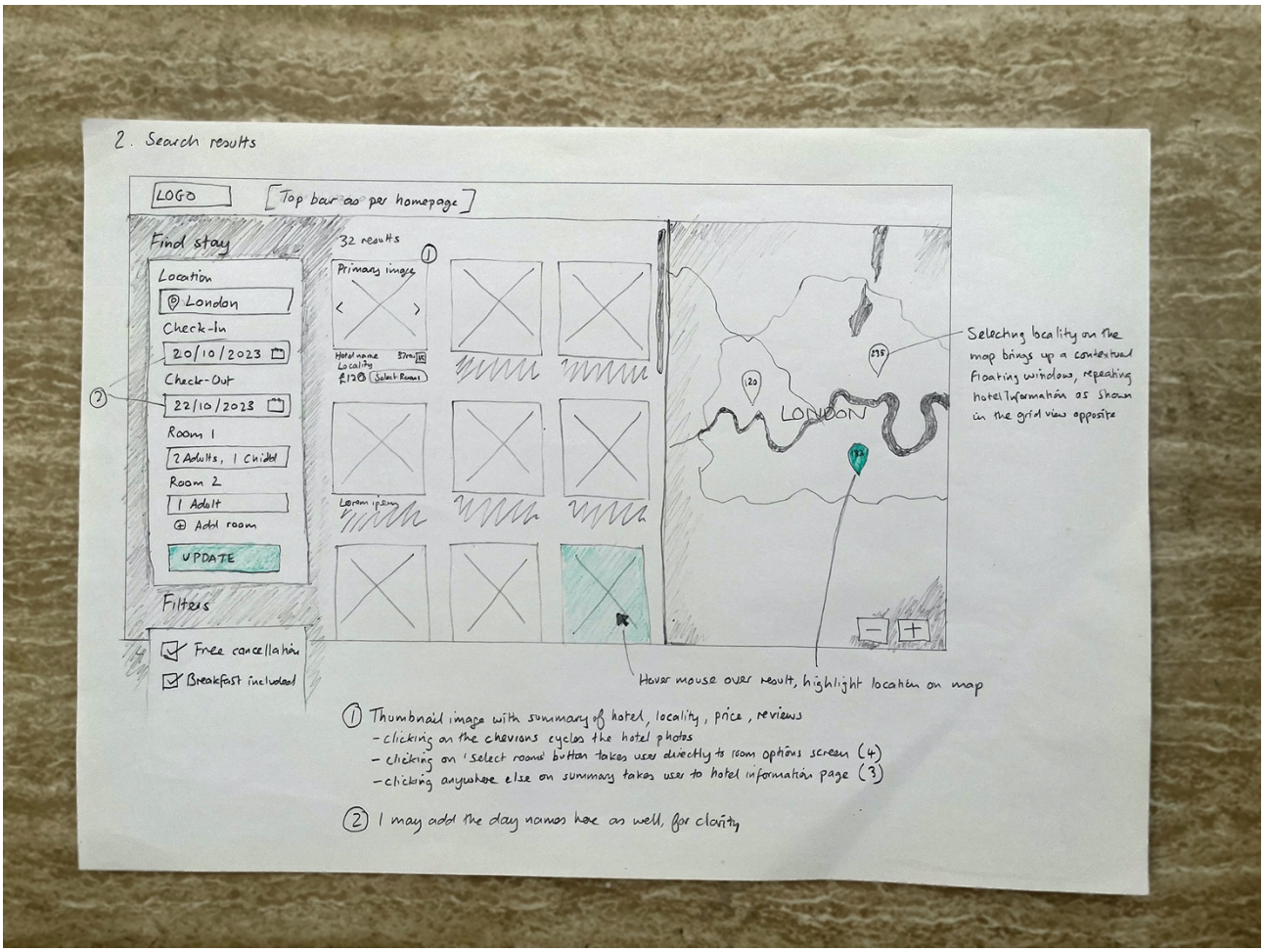
1d Homepage – occupancy selection



Addressing research & analysis

- Occupancy selection sticks to convention with a component that allows addition of rooms, and number of adults and children per room. This may need to support additional complexity, such as selecting the ages of children. For consistency with the check-in/out selector, this would display in a modal with Cancel/Done buttons.

2 Search results



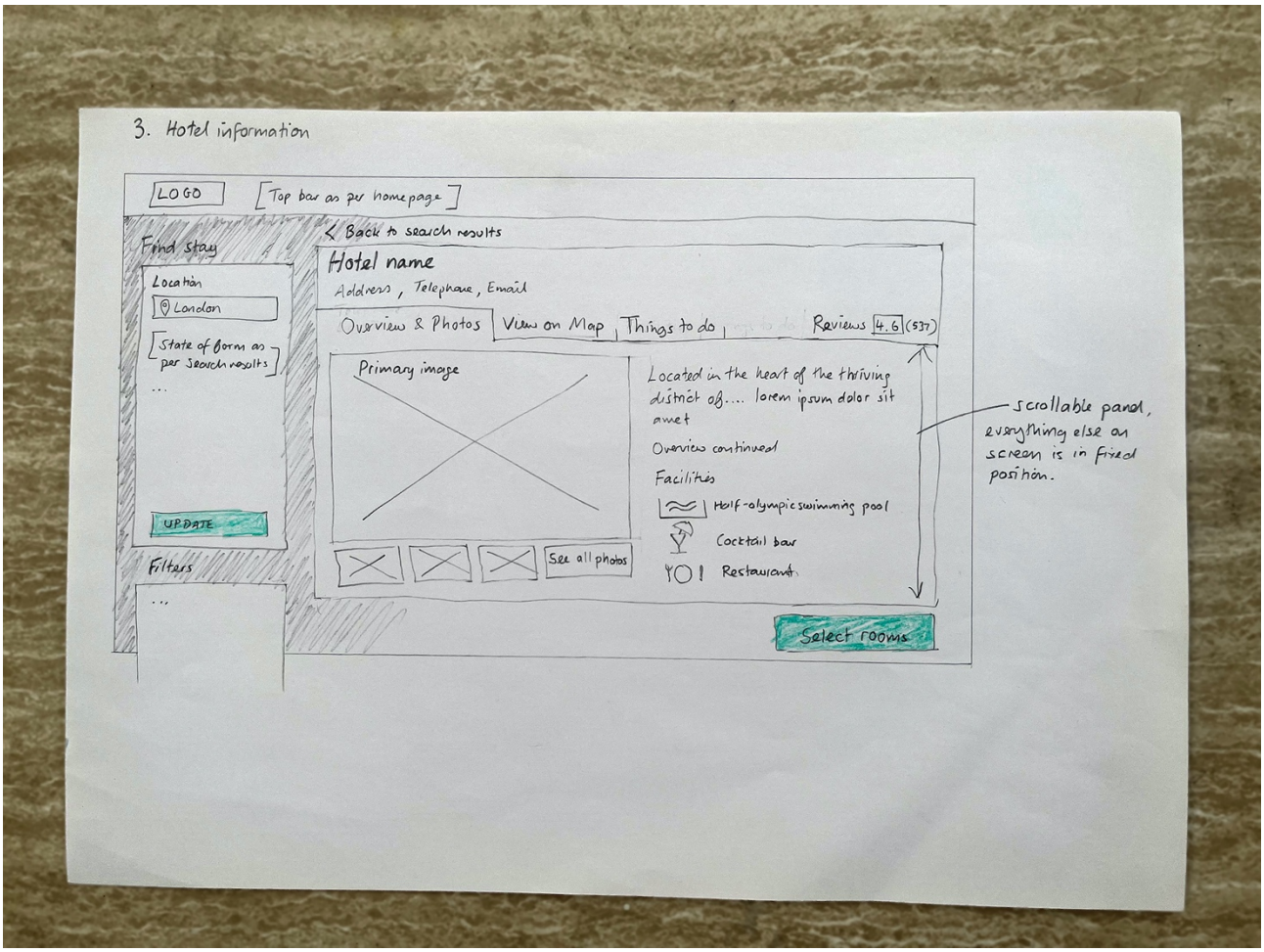
Addressing research & analysis

- Consistent with homepage, search panel and filters stay in left column. Checking or unchecking a filter will automatically refresh the results shown.
- Search results are shown in a horizontal split grid/map view. Visual search was an important theme that emerged from the affinity diagram, I felt it important not to hide behind a button, and take full advantage of the desktop.
- Grid view of ‘cards’ allows the hotel images to take precedence over other information, and reduces need for scrolling.
- Visitor ratings shown in description section of each card.

Retrospective thoughts

- I have no research of the pros / cons of a grid view vs a list, such as difficulty to show sort, or limited textual information. This consideration may benefit from user testing on a prototype, or A/B testing for more insight.

3 Hotel information



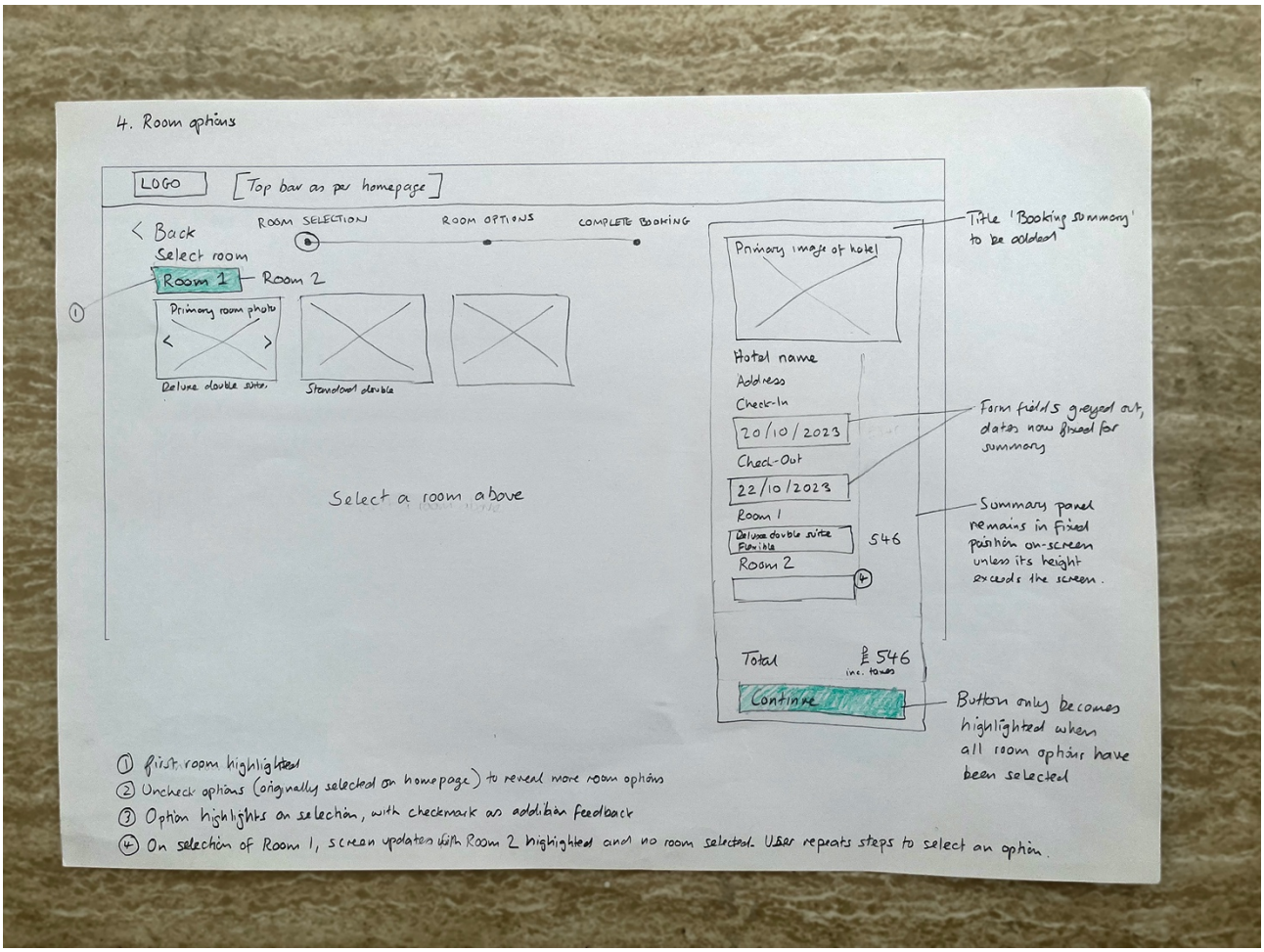
Addressing research & analysis

- Aim to retain consistency, showing search panel and filters in left column.
- Hotel information sorted into tabs along the top, rather than as sections that list down the page, to remove need for scrolling.
- Default tab shows hotel images gallery and facilities.
- User ratings shown along tab bar which links to reviews – this could be colour highlighted to draw attention.
- Hotel information encapsulated in fixed-height panel so that the primary call to action 'Select rooms' is in a fixed and highly visible position – I have opted for this label over other terms such as 'View rates', as it seems plainer language to understand.

Retrospective thoughts

- Changing filters here, which causes results to update automatically, could potentially create a scenario where the selected hotel no longer meets the criteria – I would need to consider how to manage this conflict.
- How likely would desktop users explore information behind tabs vs long scrolling? This would need to be reviewed in follow-up user testing.

4 Room options



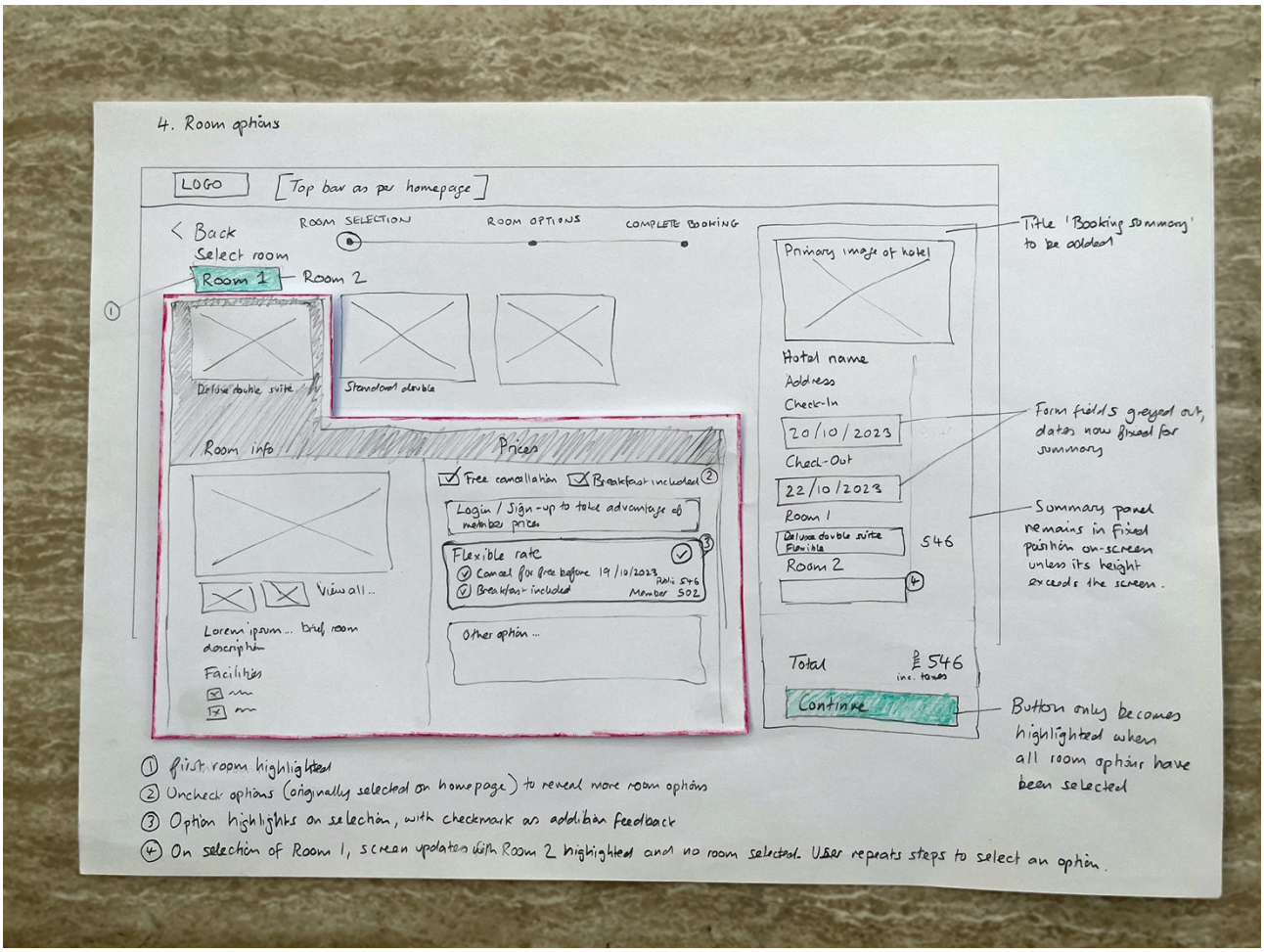
Addressing research & analysis

- Screen layout changed to reflect a shift from research to decision making; facilitating the user to make a booking: the search panel has been replaced with a booking progress indicator above and booking summary on right.
- Room options shown in same grid/card format as original search results, prioritising the images. Hovering over card shows carousel navigation controls to preview images. Clicking on a card shows the room options selected state – see next screen.

Retrospective thoughts

- I might also include room prices against each room option at this point, so the user can review price without needing to select a card.

4b Room options – selecting a room



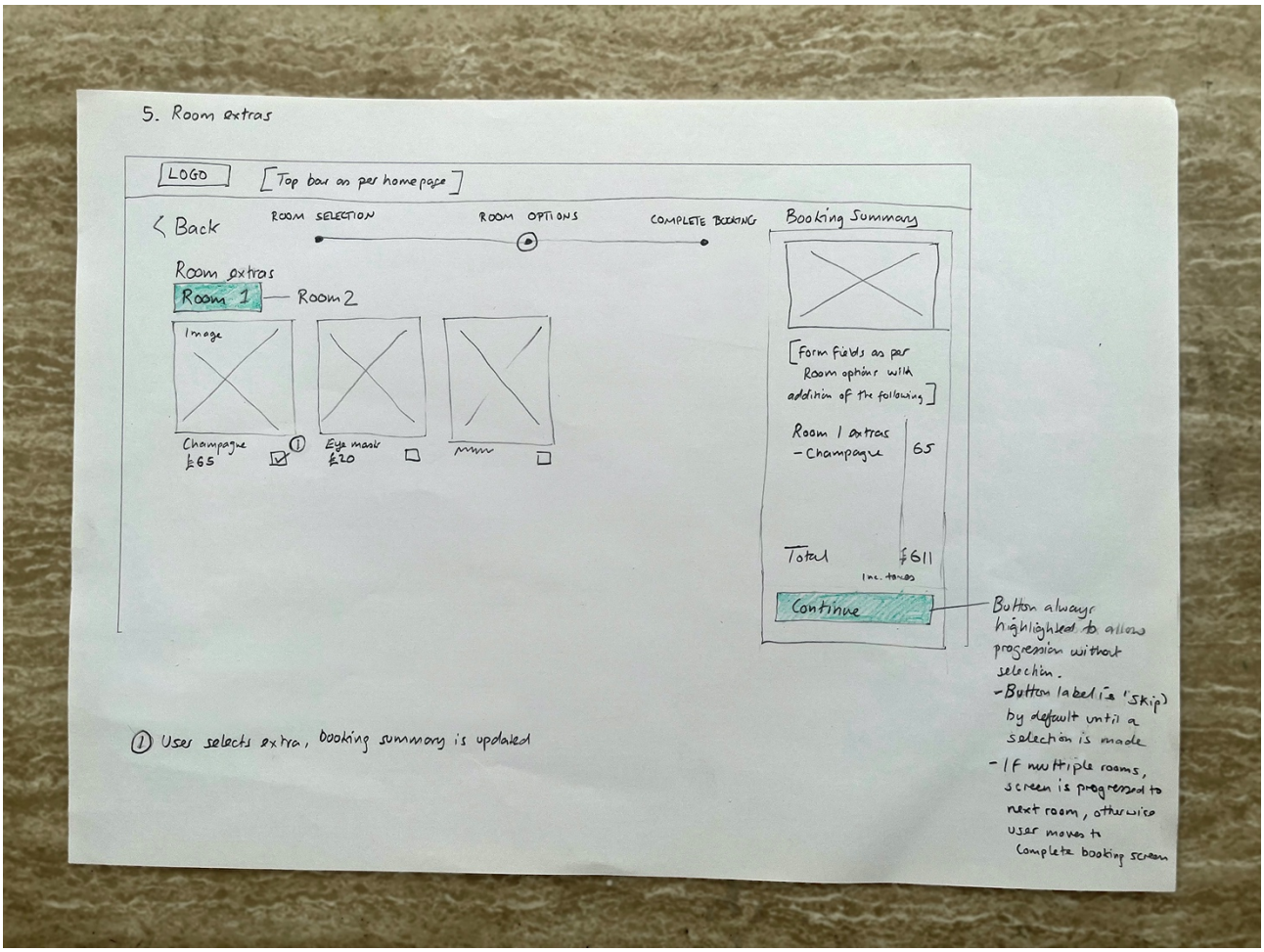
Addressing research & analysis

- On selection of room, both room detail (such as gallery and facilities) is shown simultaneously with price options, to remove need for selecting one or the other
- The settings for room-level filters originally set in the initial search are repeated in the prices section. This allows room options to be pre-filtered, reducing list considerably, the length of which was a point of confusion and frustration for many users.
- Even if room level filters were selected on initial search, they can be deselected by the user at this point if desired to show more results

Retrospective thoughts

- This was the most difficult interaction to think through. I had identified this stage as the most painful for users in the Customer journey map, and research influenced me to give room filters prominence at the initial search stage. User testing in a prototype and iteration of the concept would be most beneficial for this step.

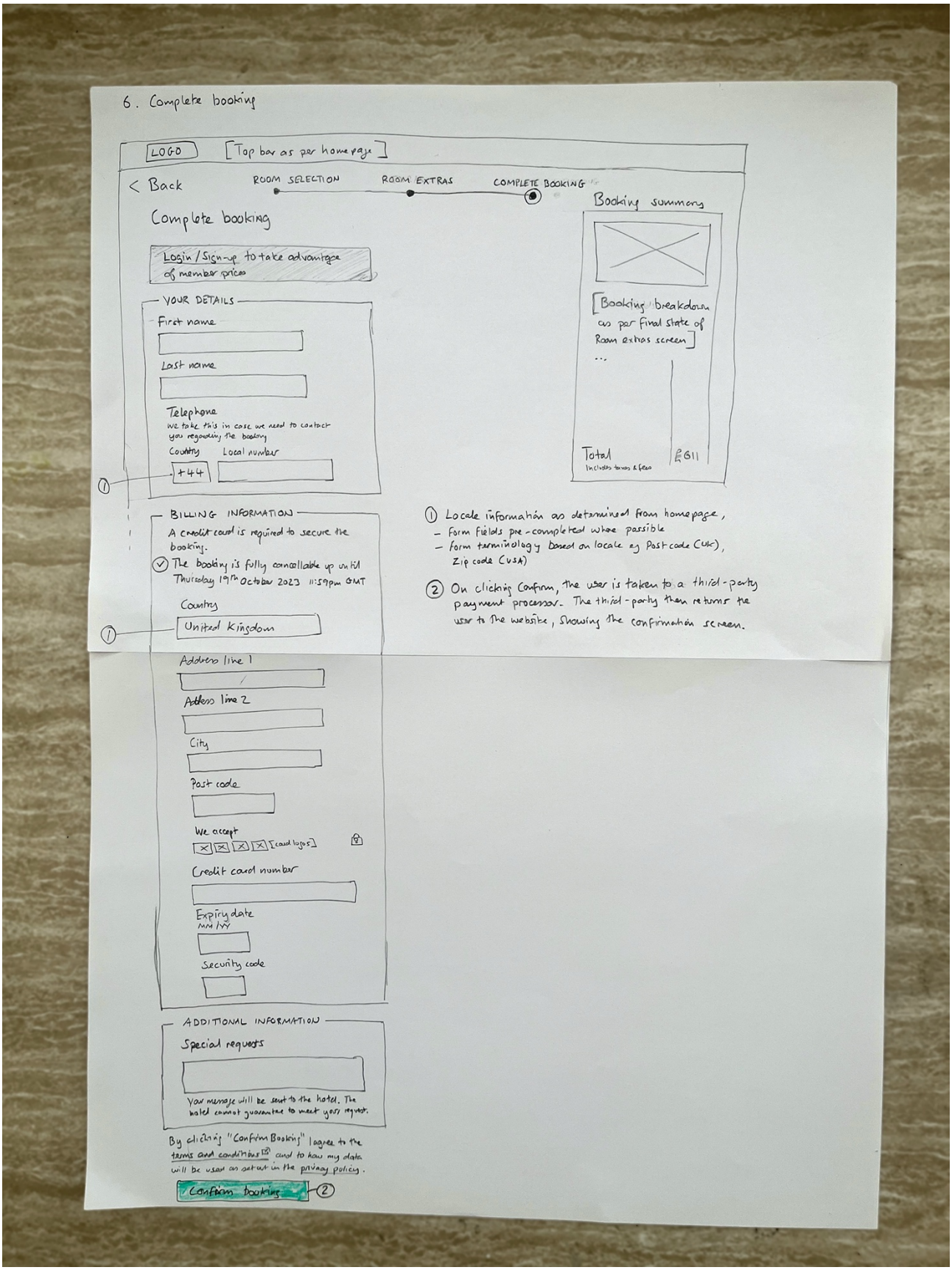
5 Room extras



Addressing research and analysis

- Room extras is an upsell feature of the process, and can be an annoyance for many users, unless they can skip quickly past it. As per the notes, the ‘Continue’ button is labelled ‘Skip’ before any selection is made, and should always visible without need for scrolling, so users can advance quickly if desired.

6 Complete booking



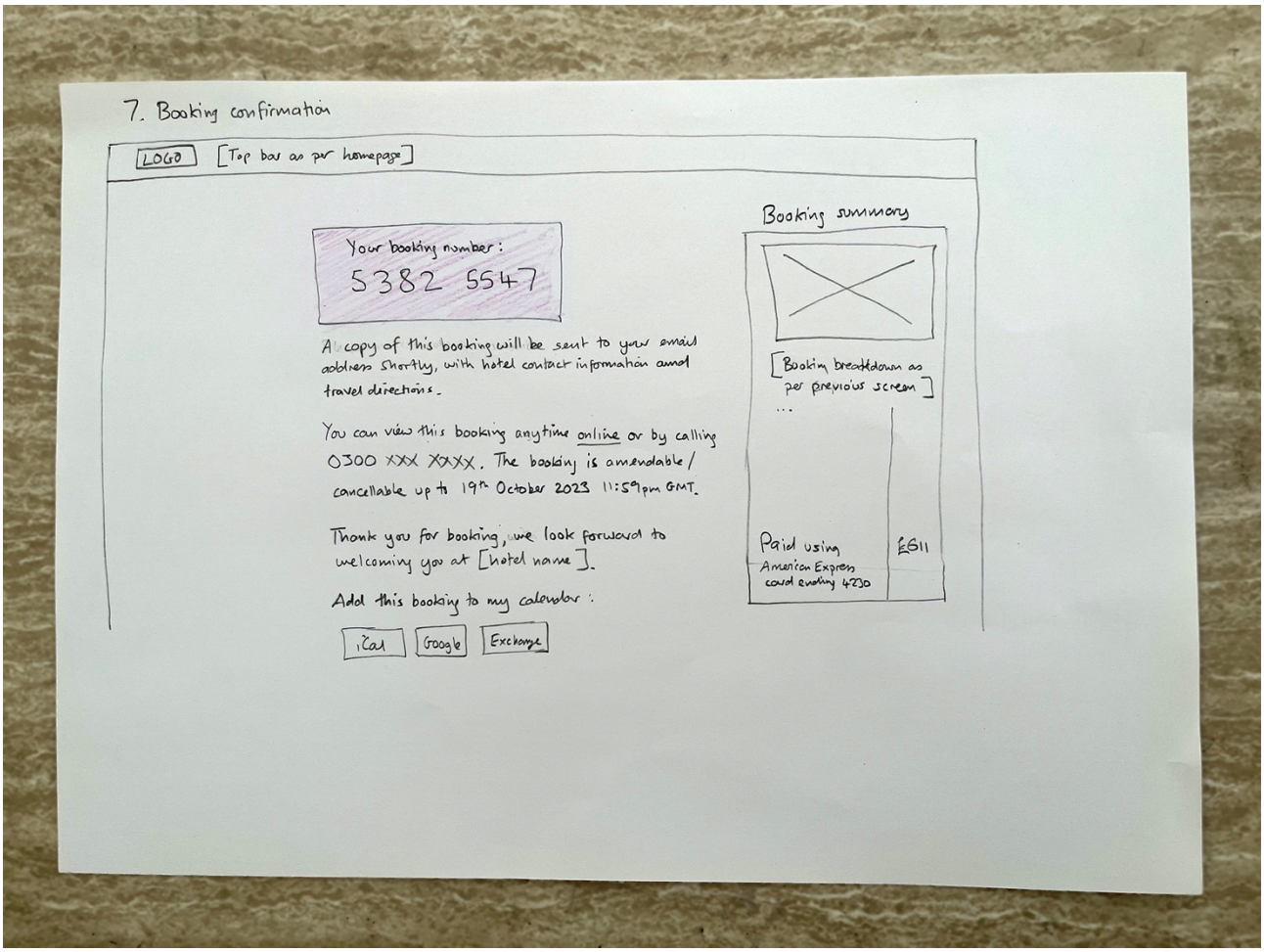
Addressing research & analysis

- User research was limited here due to users in testing not completing this screen; applying UX to this screen falls back to best design principles, these include:
    - Only information absolutely necessary should be requested here
    - Explanation of why we're asking for the information given if intention unclear
    - Appropriate symbols and design used to increase perception of security
    - Form fields formatted for ease of entry and readability (eg chunking of data)

Retrospective thoughts

- I don't know whether the term 'Booking' is preferable to 'Reservation'; I use the former term is it may be regarded more colloquial – and therefore more easily understood. This admittedly is a locale-specific question, but may benefit from A/B testing.

7 Booking confirmation



Addressing research & analysis

- No user research was carried out on this screen, it is written based on general design principles, such as giving good feedback, being polite and predictable – i.e. what happens next?

Retrospective thoughts

- I don't know if the full repetition of the booking summary panel is necessary here. This screen could in fact be an opportunity to help get the user excited such as teaser photos of a staff welcome, a countdown to arrival, information on a complementary discount or gift on arrival etc.