

# Customizing Springshare's Spaces to Maximize User Experience

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## Introduction

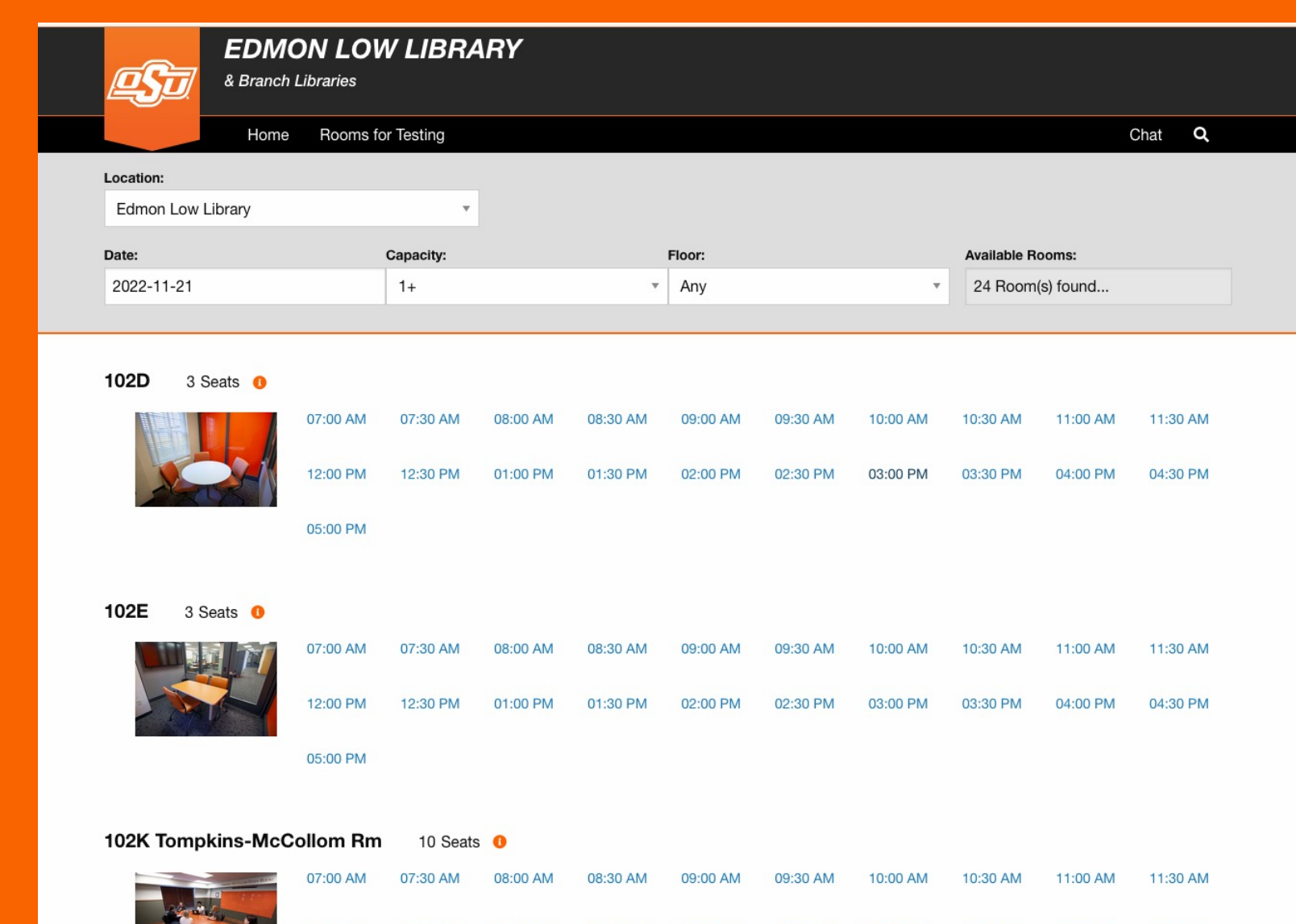
The increasing demand for study rooms has been a consistent feature of library renovation projects. Additional study rooms and new seating for students have transformed Oklahoma State University's (OSU) original 1953 main library building, which now features enhanced amenities, along with the creation of specialty areas featuring equipment such as 3D printers, audio, video, presentation, and visualization spaces.

## Background

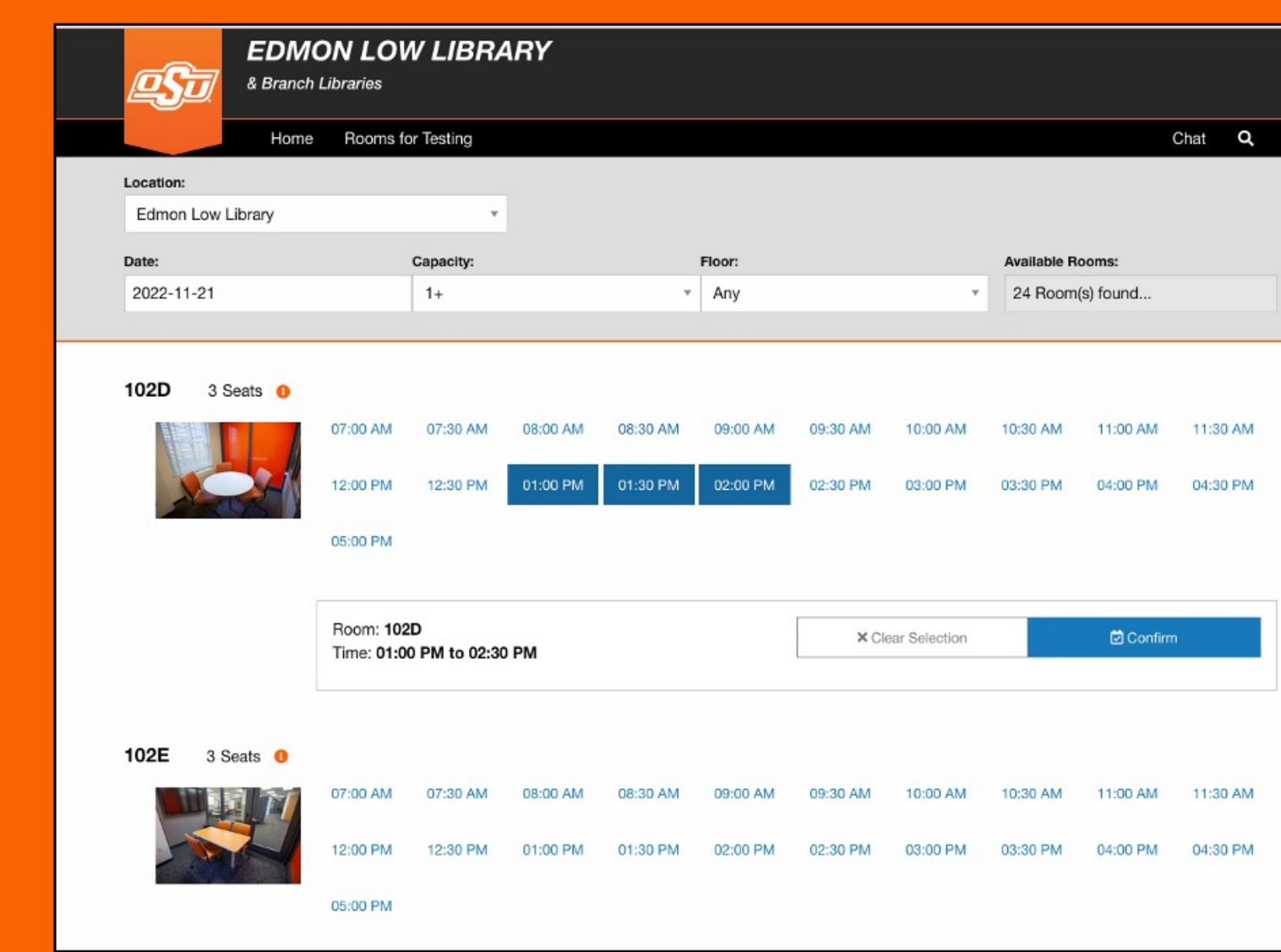
Before 2015, the OSU Library required users to visit or call the circulation desk to reserve a room. This process changed as the library implemented Springshare's LibCal platform. Upon implementing LibCal's Room Bookings application, users could reserve rooms through the library's website. With just twelve rooms in 2015, the popularity of dedicated group study space increased. As of 2023, the library has expanded to twenty-four group study rooms and six specialty spaces in the Creative Studios area.

In 2020, the OSU Libraries Application Development Team began creating a user interface (UI) that would extend the capabilities of Springshare's LibCal Spaces application, as OSU migrated away from Room Bookings. The new UI needed to be flexible for future room additions, mobile-friendly, and provide the ability to reserve a room with minimal clicks.

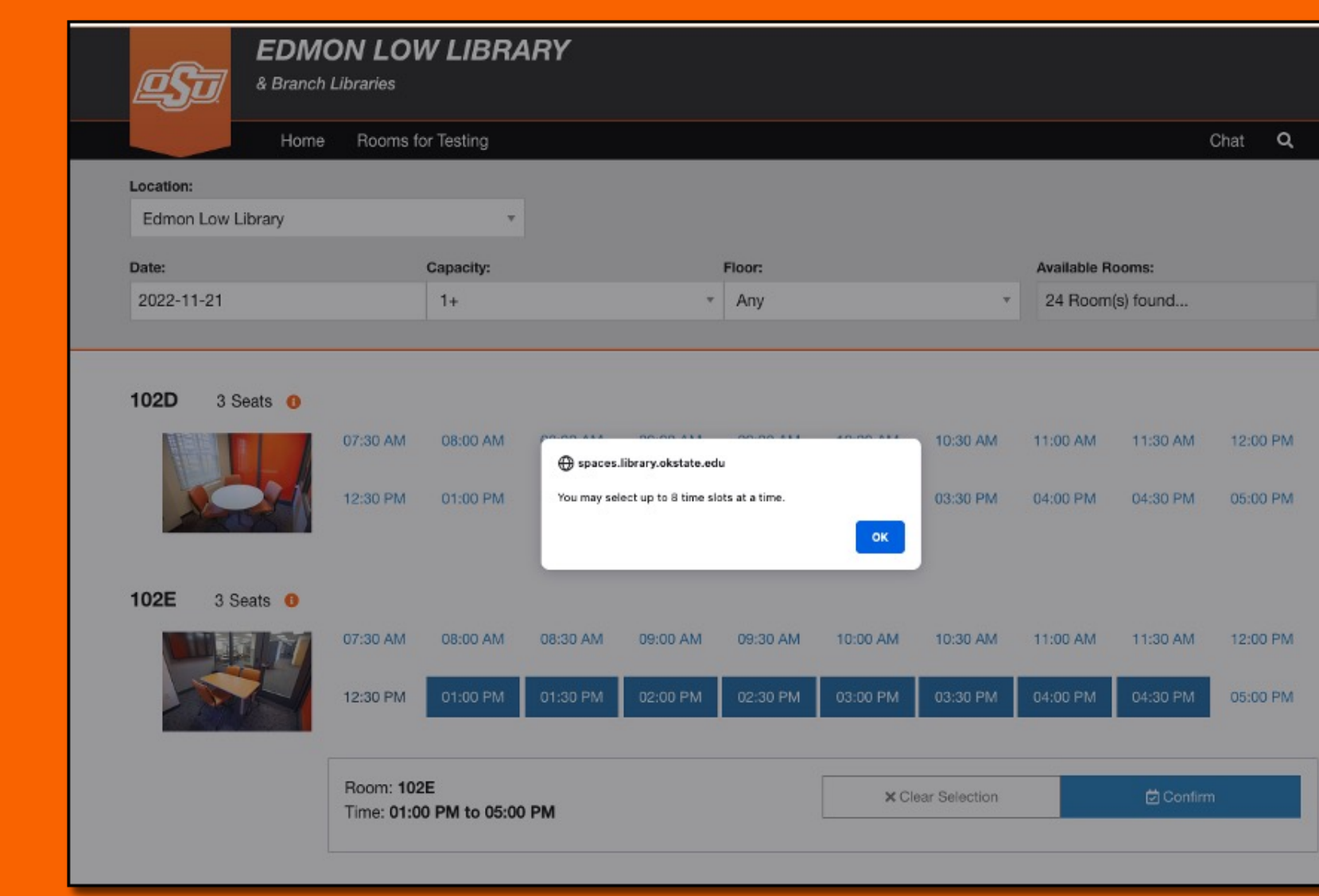
# The responsive UI is both attractive and mobile-friendly, which improves the student experience



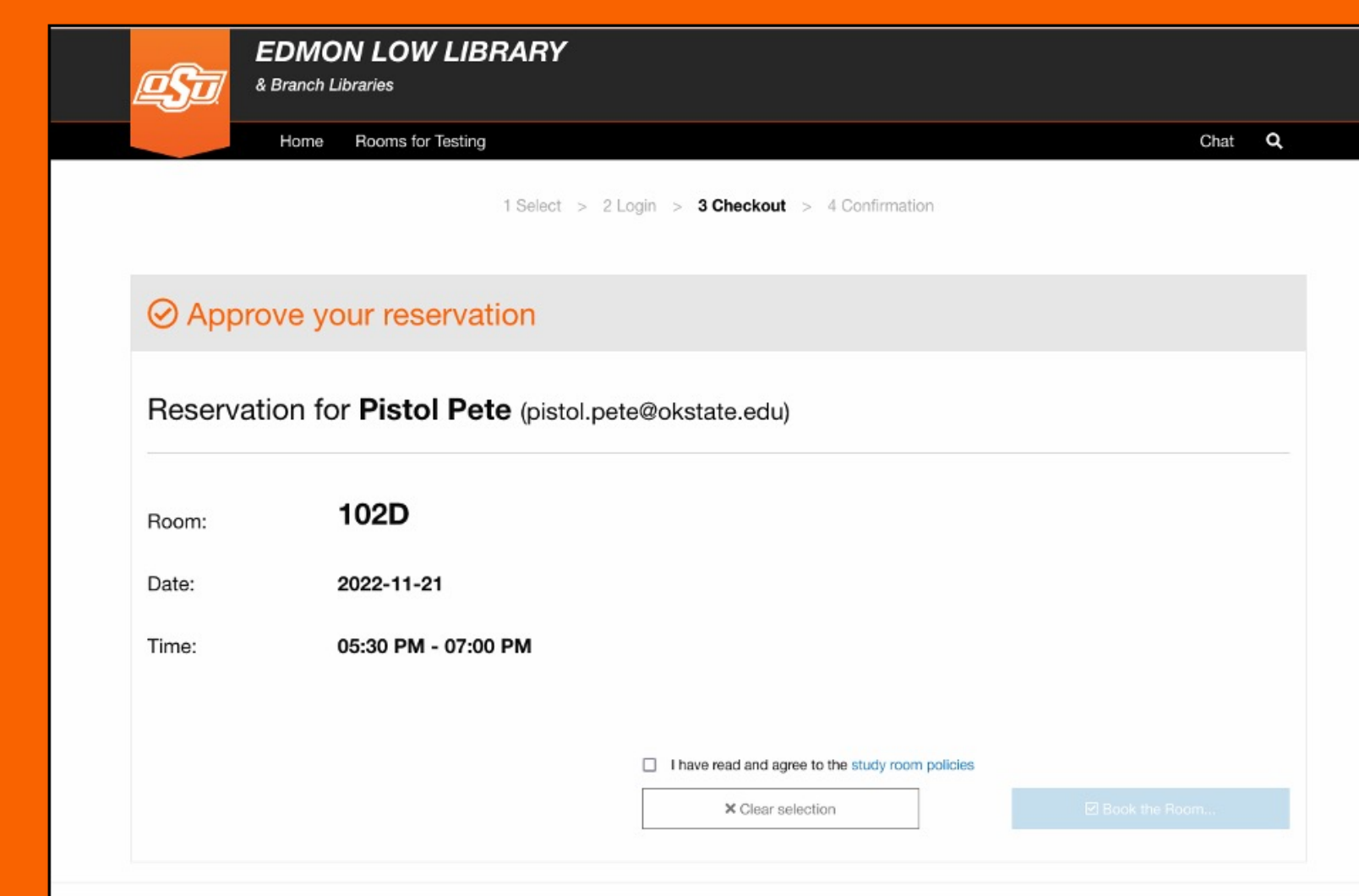
Home page list of available rooms



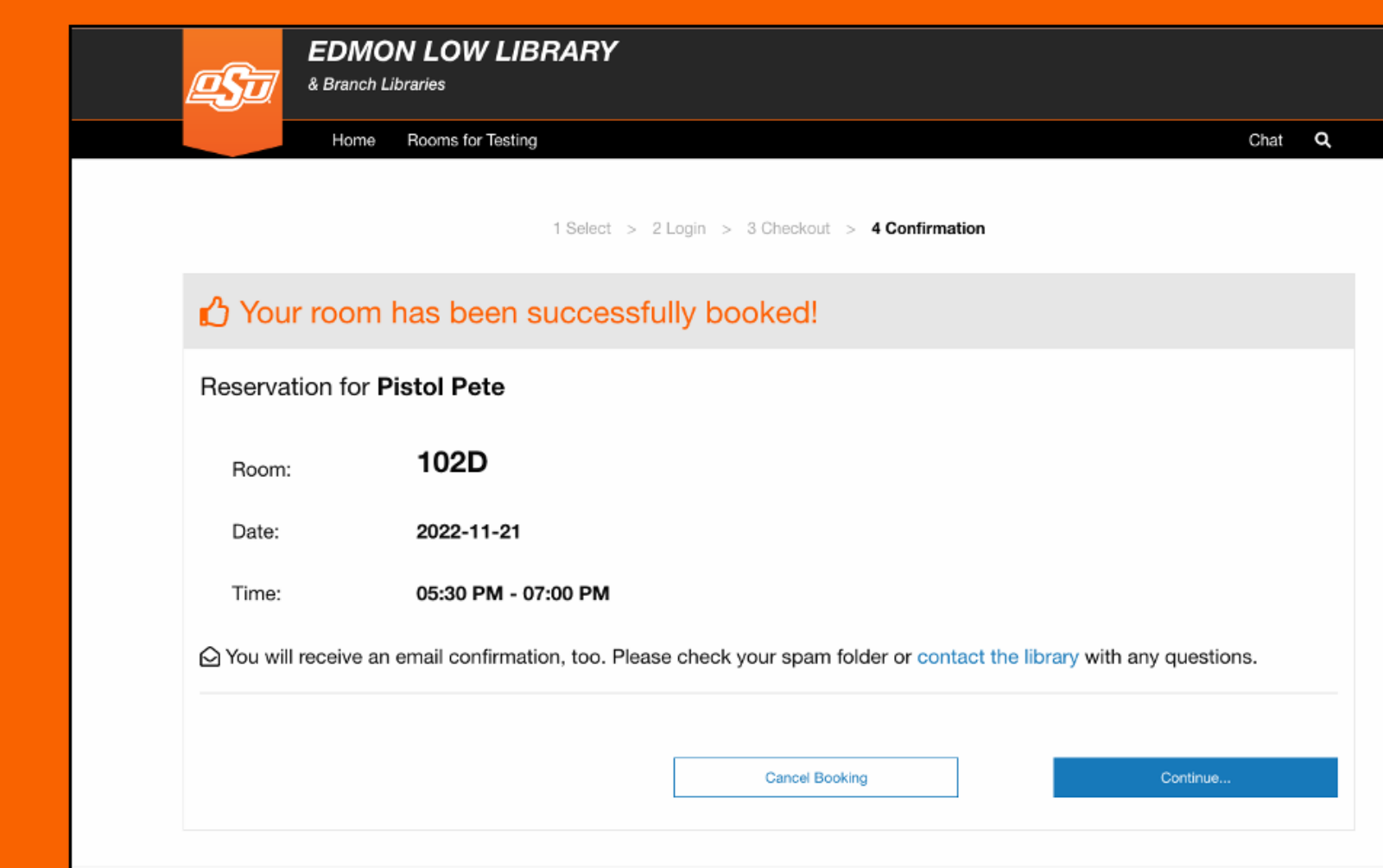
Select time slots



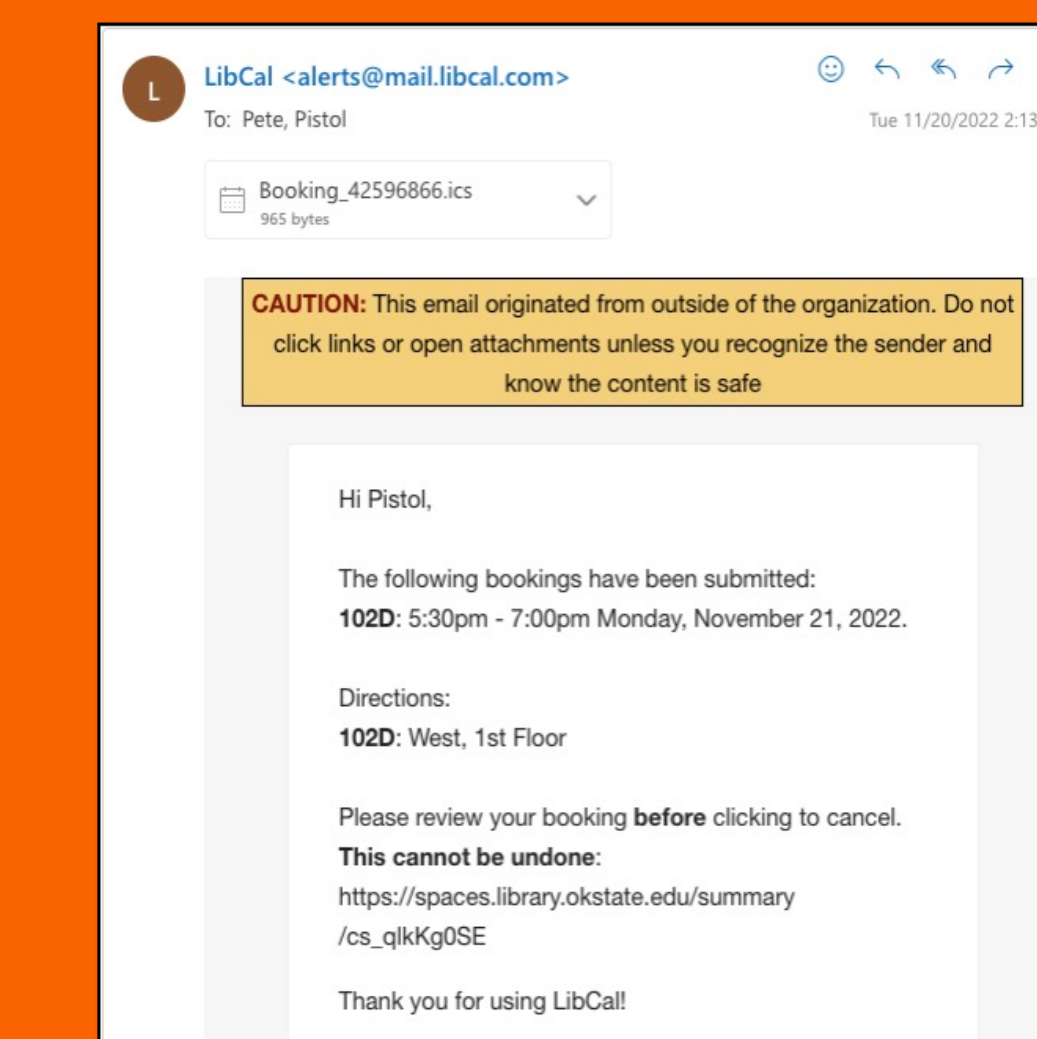
Error message based on rules



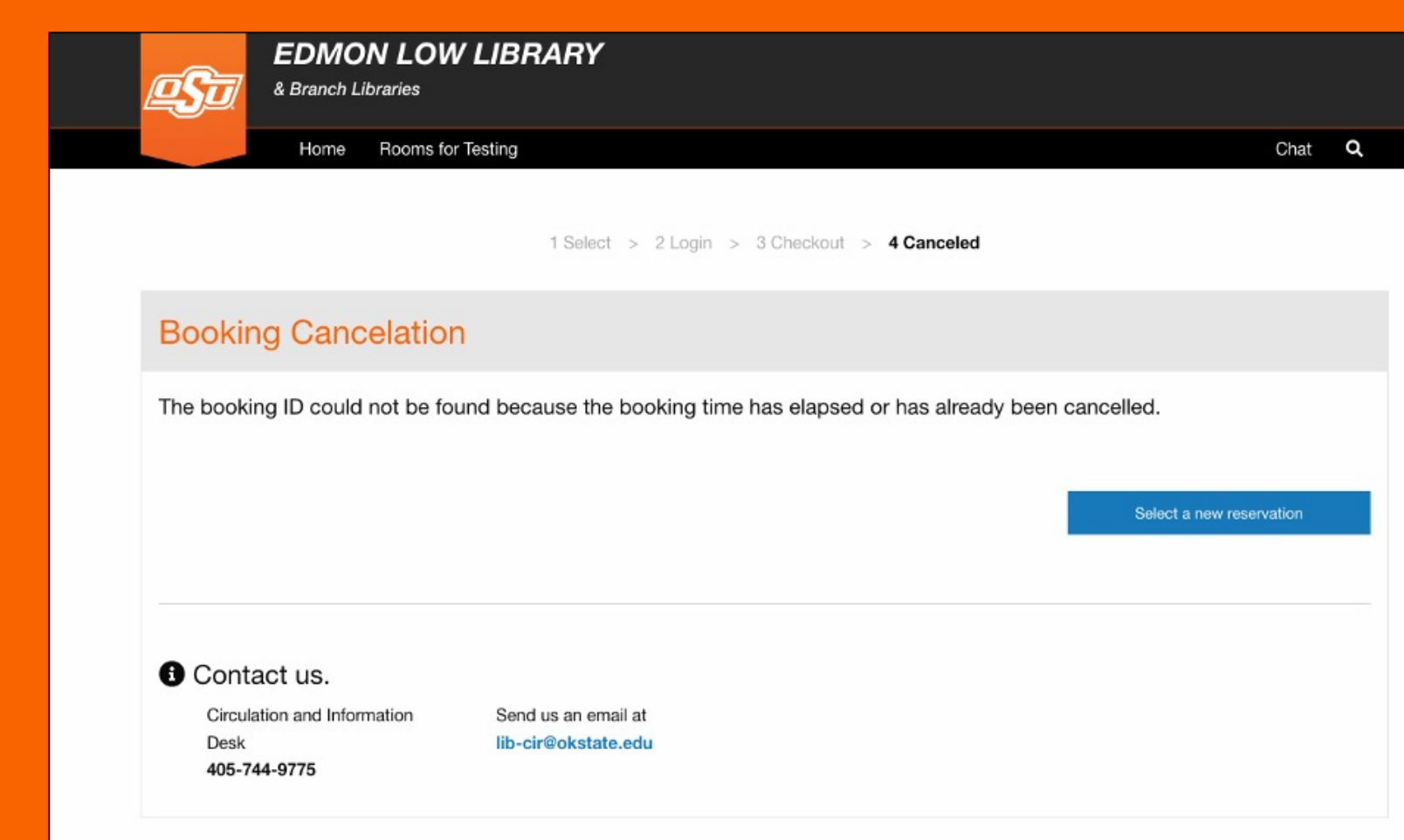
Reservation approval



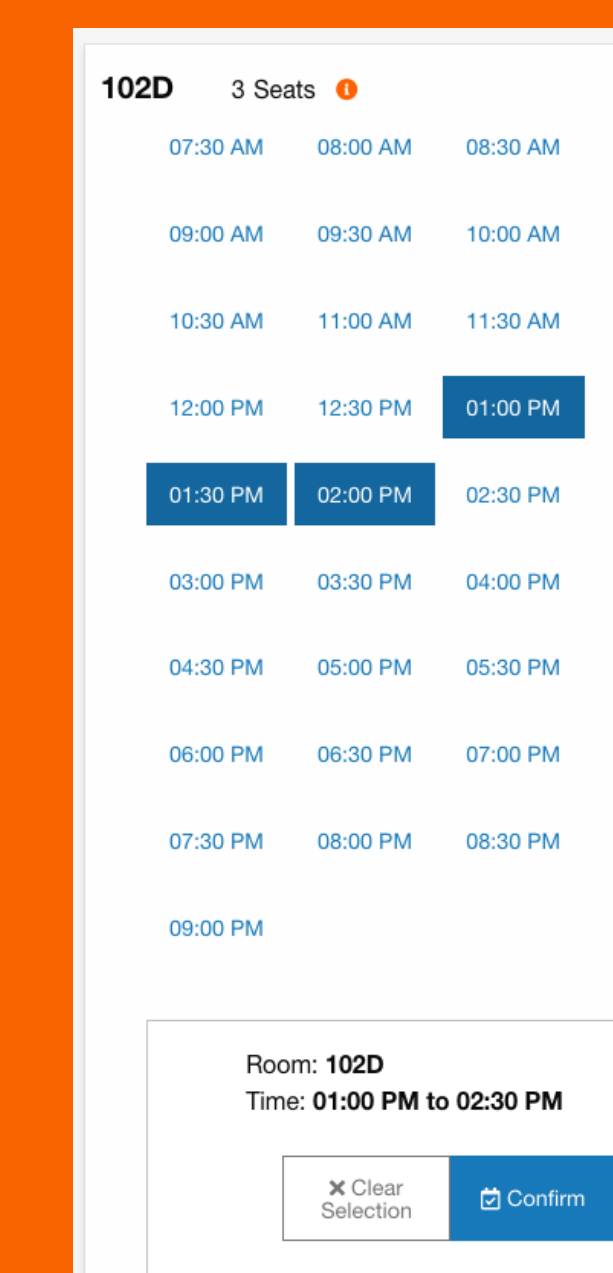
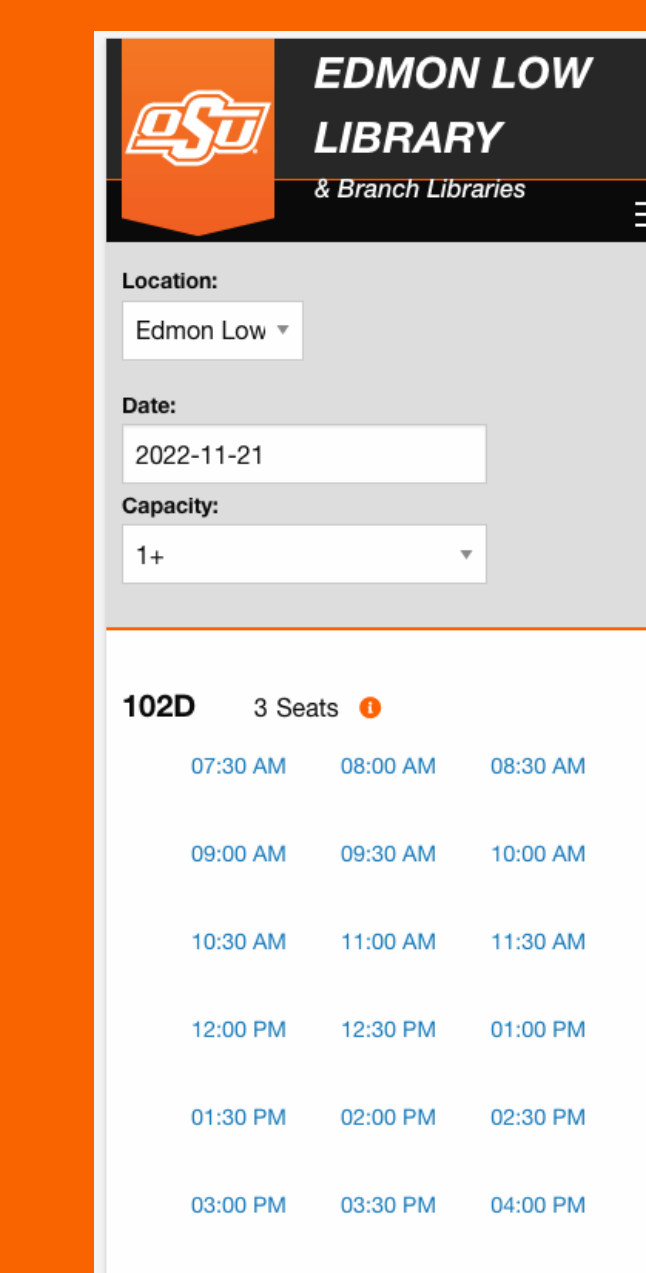
Reservation confirmation



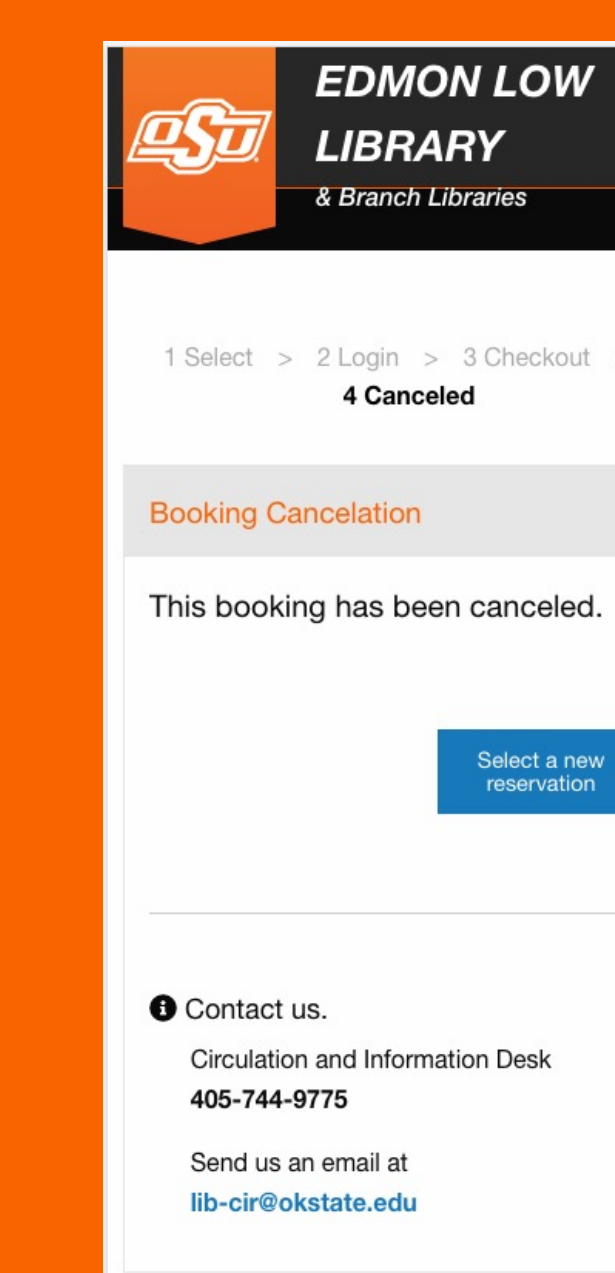
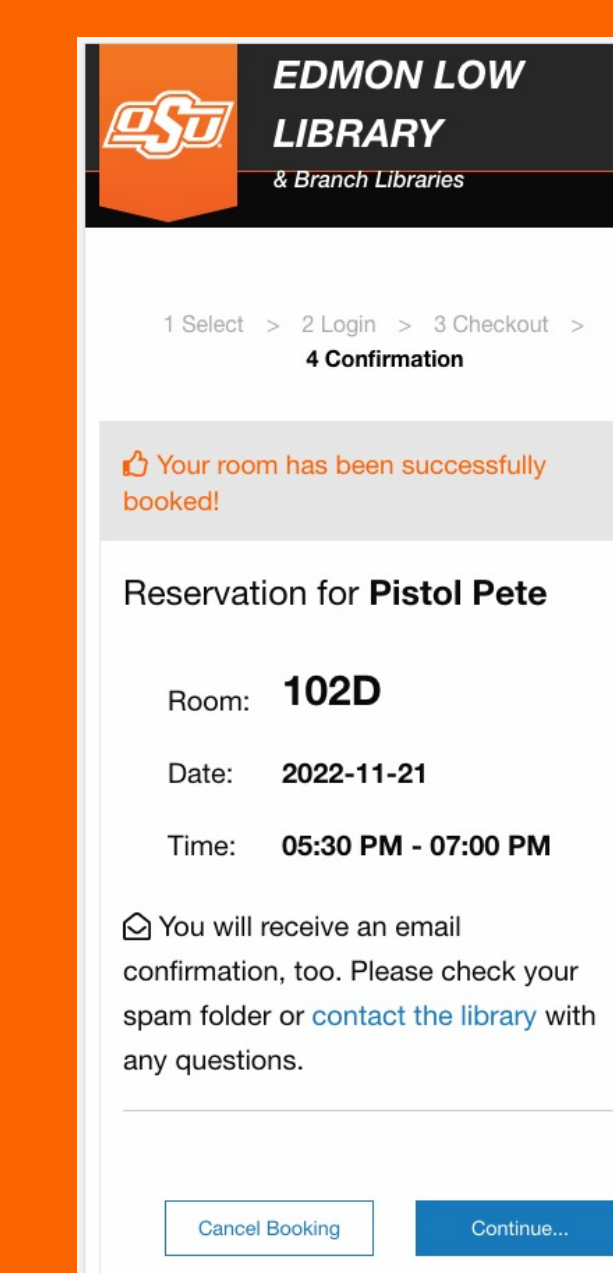
Confirmation email



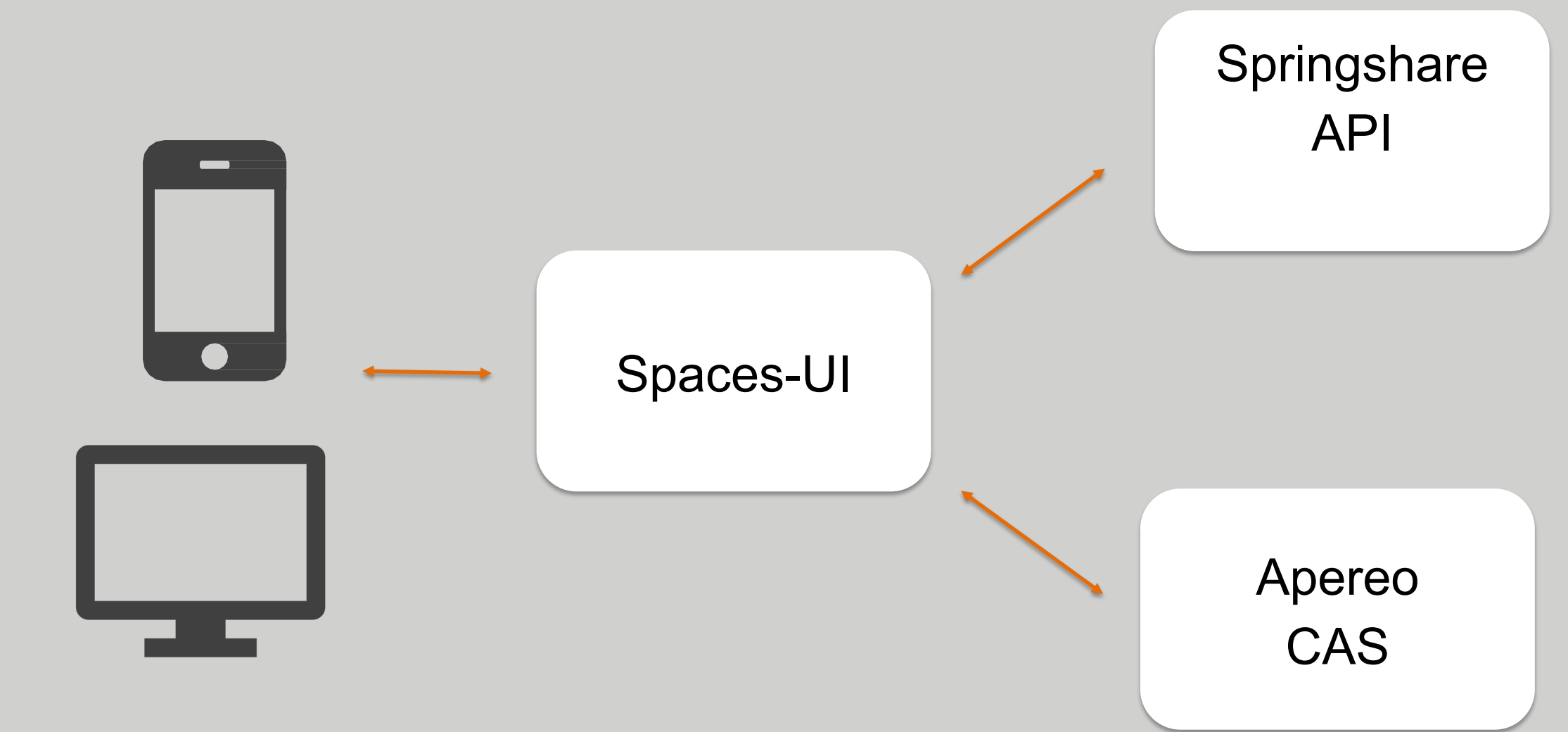
Reservation cancellation



Some mobile views



## Architecture



## Development

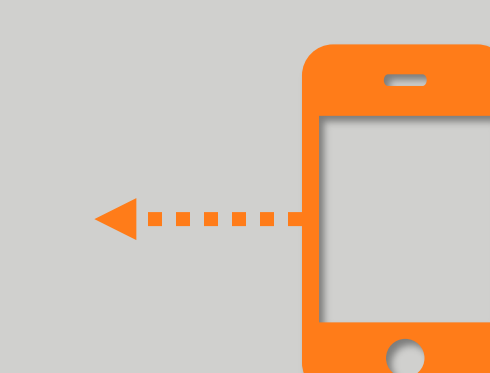
Adopting an agile software development approach, the team planned the project based on requirements, conducted usability analysis, and created UI mockups that were refined with feedback. Development cycles included stakeholder input, enhancing the system and implementing additional requirements.

## Features

- Visibility of rooms and available time slots with use of the grid view.
- Flexibility to add new locations, rooms, and zones.
- End user filtration using locations, date, zones, and room capacity.
- Attractive and responsive UI compatible with handheld devices.
- Easy integration into most Single Sign-On (SSO) systems, such as Apereo's Central Authentication Service
- Includes client-side and server-side rules and error messages.

## Conclusions

1. Room reservation usage continues to increase.
2. Reservations with the new UI are easy to complete on a variety of devices.
3. Built as an open-source application to assist other Springshare libraries looking for an alternative Spaces UI.



Take a picture to view the application.