QA CINEMA PROJECT

Dan Harrison

Onur Hassan
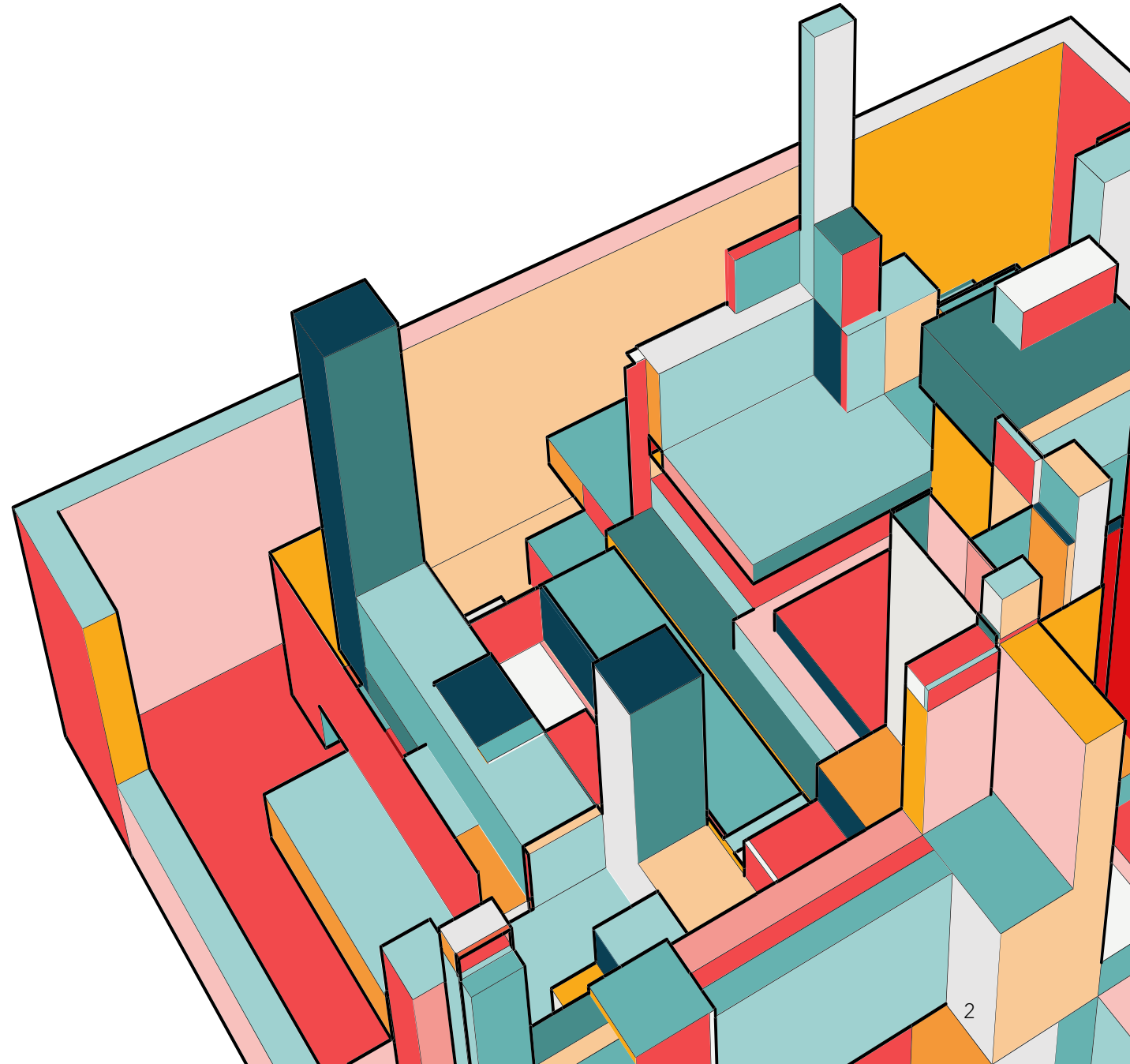
Andy Pimlott

Shai Lynch

INTRODUCTION

Create a full stack application for a newly opening cinema using a SpringBoot base and a sleek user-friendly web interface

- Dan Harrison – Scrum Master

- Andy Pimlott – Film Architect

- Shai Lynch – The hero we didn't know we needed

- Onur Hassan – The underdog

MVP

Pages

The application needs to have a plethora of pages including but not limited to; Home, About, Films, Screens, Getting here, and Discussion Board.
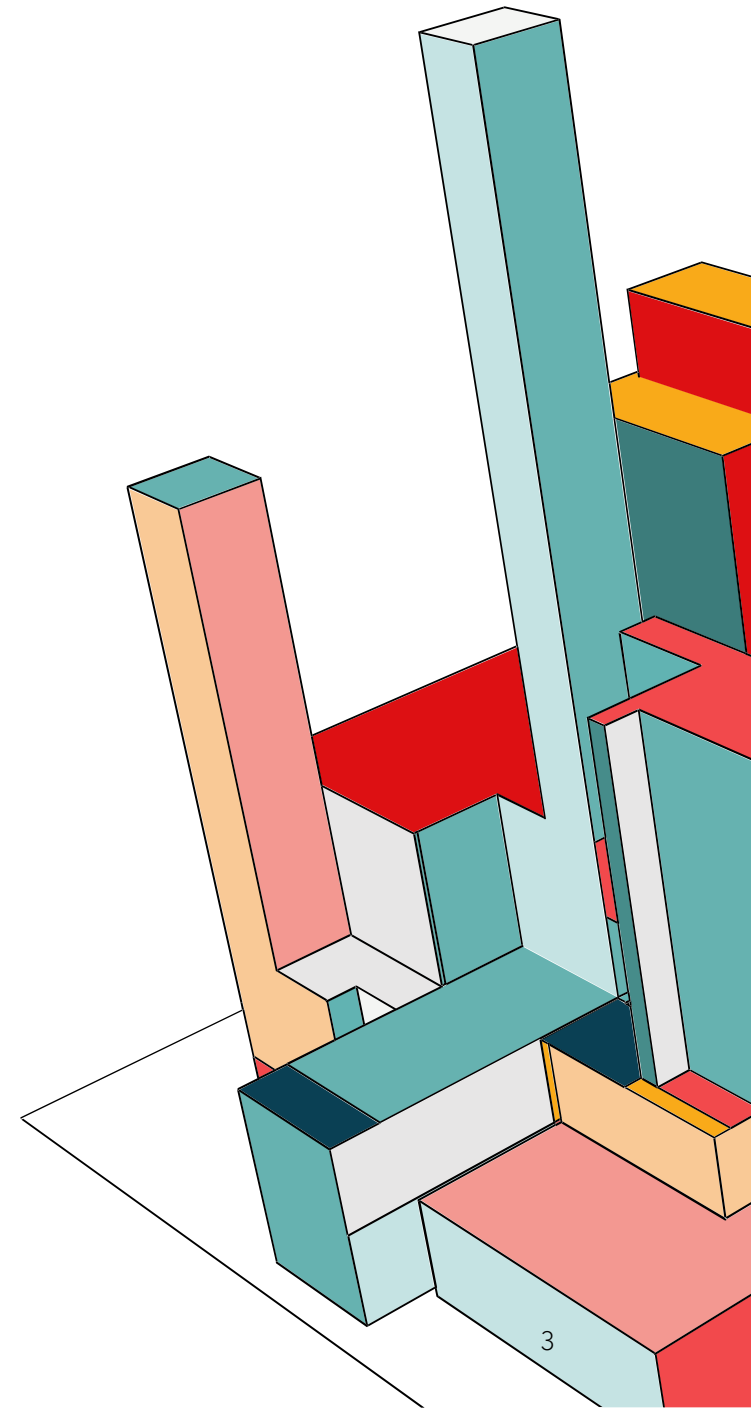
Logo

A custom logo should be used for the site, and to give the new Cinema some brand identity, this should be present on at least, the home page.
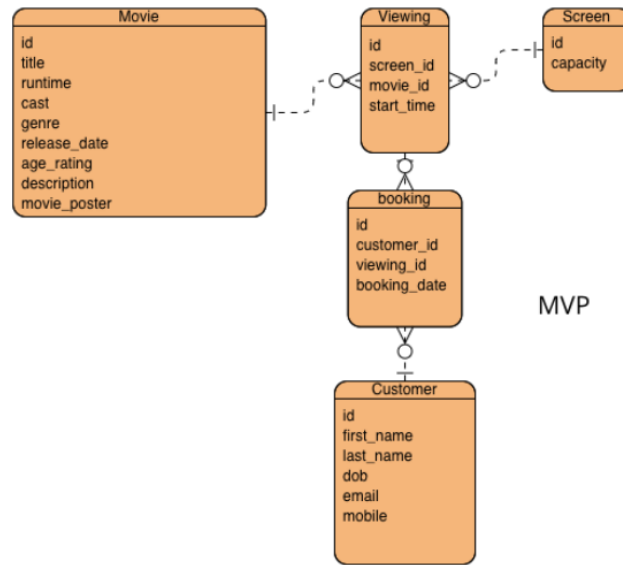
Navigation

All pages need to be easily accessible through the main site navigation, which is present and the same, on all pages.
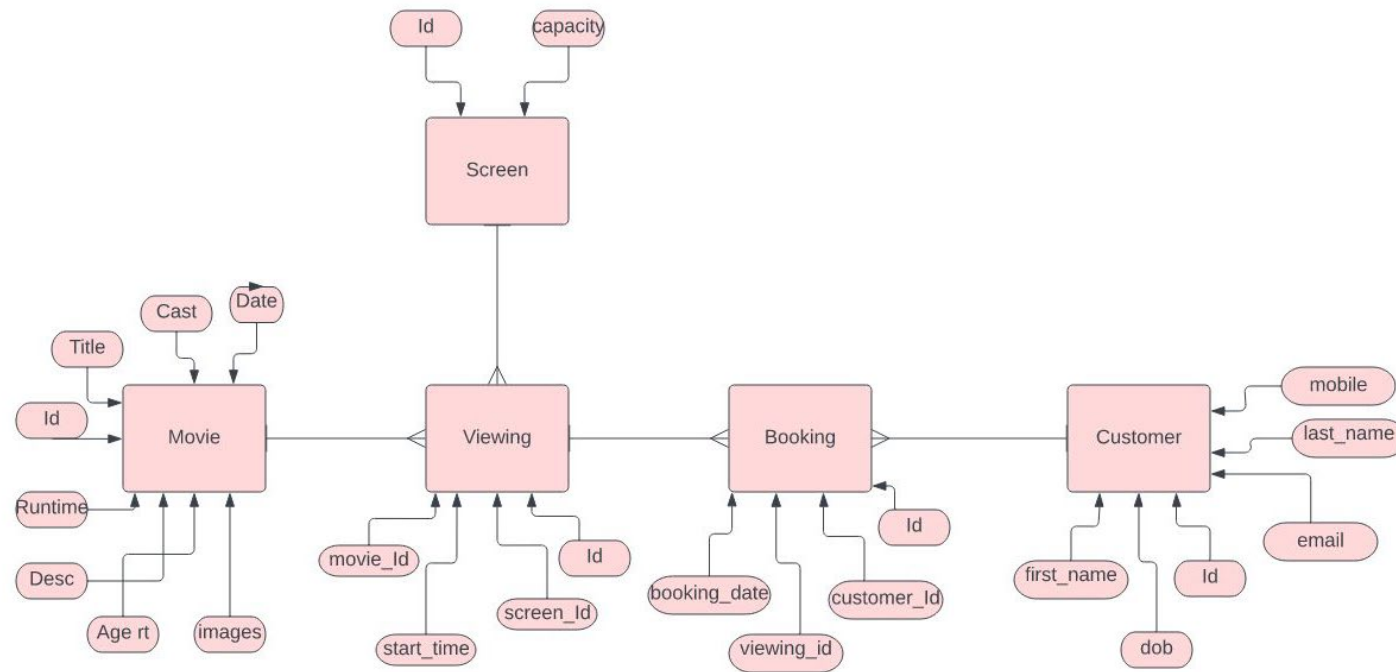
Functionality

All pages which the customer will interact with need to have the expected functionality. E.G., being able to book tickets, or add comments to discussion board
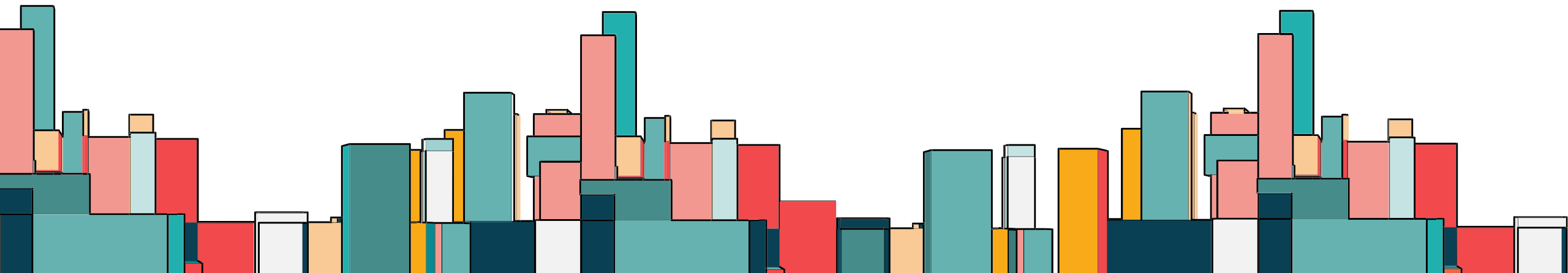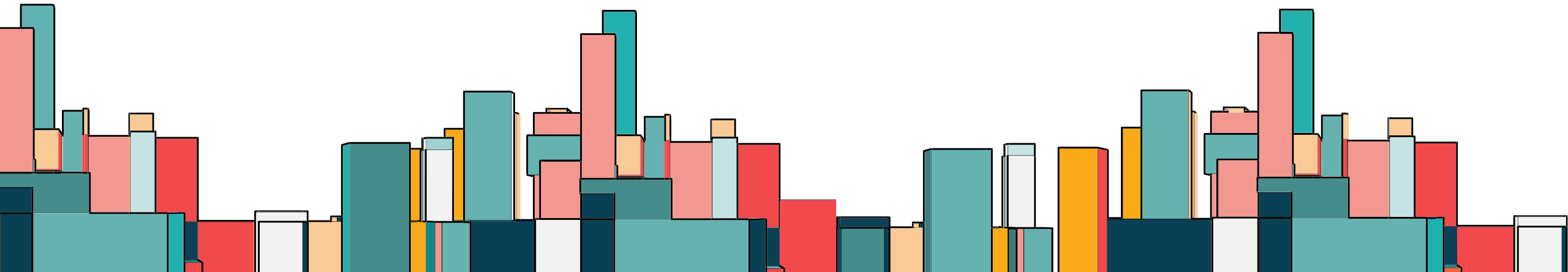
DOCUMENTATION - ERD

DOCUMENTATION – UML

Pitch deck title

DOCUMENTATION – RISK ASSESSMENT

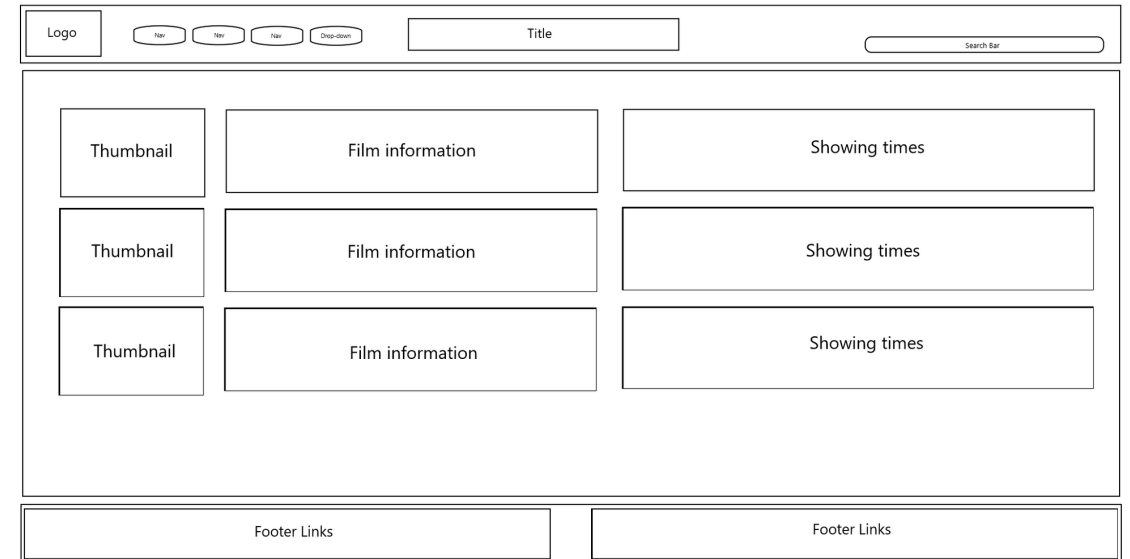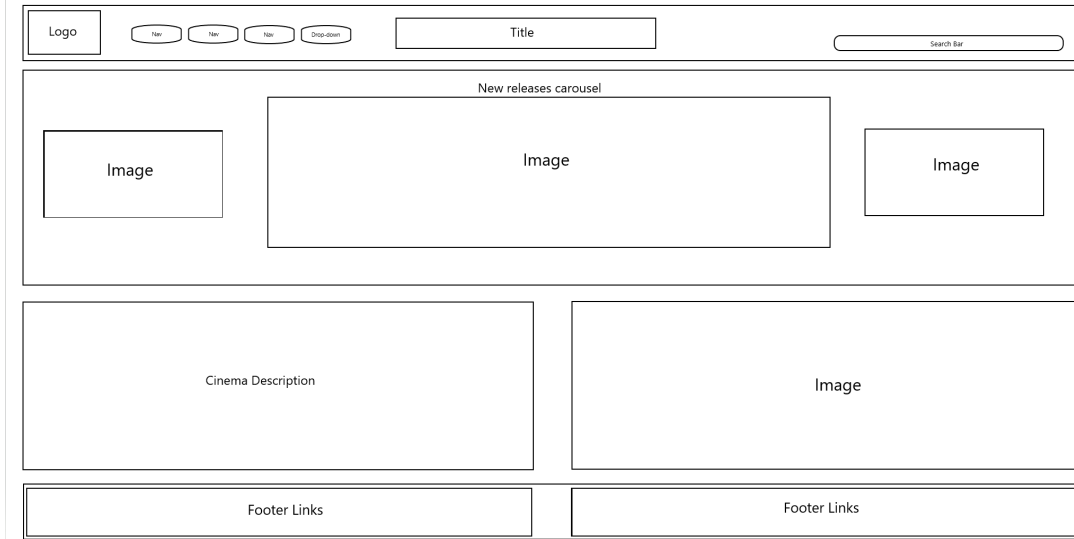|	Risk	Statement	Response	Objective	Likelihood	Impact	Risk Level				Minimal	Minor
1	Strain injuries	Working for too long may induce strain injury	Get up and move around every now and again	Maintain a reasonable level of comfort while working	Expected	Minimal	4			Guaranteed	5	10
2	Spillage on Laptop	Spillages or dropping crumbs on a laptop can cause it to stop functioning correctly	Ensure an even firm surface and all food and drink are kept well away from the work area	By having to leave the work desk for food and drink breaks can keep the area tidy as well as helping with reducing strain injuries, but most importantly, stops any accidental damage to the laptop	Possible	Major	8			Expected	4	8
3	Electrocution	Faulty wires or plugs not correctly used can cause shocks or electrocute someone if they touch those areas	Maintain and replace any damaged wires and make sure all plugs are fully pushed in to their respective sockets	Electrocutions can be fatal, so making sure everything is in good working order, especially wires, and have been correctly used will help reduce exposure to metallic components	Likely	Severe	15		LIKELIHOOD	Likely	3	6

DOCUMENTATION – MOSCOW

Must	Should	Could	Won't
Home page • **Be generally attractive** • **The page shall be the default for the entire site** • **Starting from the home page, site users may navigate to other areas of the site** • **The site should have a picture or graphic evocative of the movies or the cinema on it** • **Communicate to the viewer the purpose of the site**	Header and footer Each page of the site contains a uniform header and footer, both with links to commonly accessed pages. • The footer appears identically on all pages of the site. • The footer links to the Home Page • The footer links to the About Us • The footer links to the Contact Page	Manage booking functionality - customers	Automatic discounts

DESIGN – WIREFRAMES

SCRUMS/SPRINTS

Daily stand-ups at 9am were used to organise the work-day and ensure there was no confusion or overlap with tasks
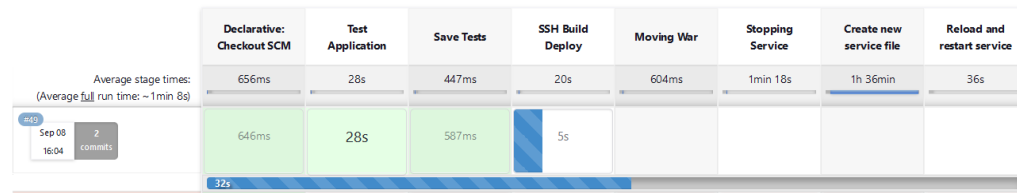
Two main sprints, first sprint was back-end focused, second was the front-end focused sprint. Focusing the groups efforts on 1 aspect of the application

End-of-day catch up, to update how far along we are on the project, and give an initial plan for the following day

Pitch deck title

DEVELOPMENT PROCESS

Sprint 1	Set up Jenkins pipeline using past Spring app to test	Starting from a base SpringBoot application and refactoring to match our needs.	Wrote tests for entire backend to ensure code worked as intended and was fit for purpose	Added any extra required functionality for specific aspects of the application
Sprint 2	Created base HTML pages and a global CSS page to ensure uniformity site-wide	Designed Wireframes with initial page design ideas	Added content and CSS/JS to each page to resemble wireframe/desired design	Went through all pages ensuring JS functionality was working as intended.

JENKINS PIPELINE

TESTING – COVERAGE

Aimed for industry standard 80% coverage overall, however ended up with closer to 90% at the end of the project.

Element	Coverage	Covered Instructions	Missed Instructions	Total Instructions
com.qa.cinema	96.3 %	6,471	251	6,722
src/main/java	88.2 %	1,880	251	2,131
src/test/java	100.0 %	4,591	0	4,591

TESTING – CODE

```java
@Test
public void createBookingForm_validForm_SaveForm() {
    Booking validBooking = new Booking(1L, 1L, "31-08-22", 1L);

    Booking saveBooking = new Booking(1L, "31-08-22", 1L);

    Mockito.when(this.service.addBooking(saveBooking)).thenReturn(validBooking);
    assertEquals(validBooking, this.service.addBooking(saveBooking));
    Mockito.verify(this.repo, Mockito.times(1)).save(saveBooking);
}
```

```java
@Test
public void constructorTests() {
    Booking booking1 = new Booking();
    Booking booking2 = new Booking(3L, "31-08-22", 3L);
    Booking booking3 = new Booking(4L, 4L, "31-08-22", 4L);

    assertTrue(booking1 instanceof Booking == true);
    assertTrue(booking2 instanceof Booking == true);
    assertTrue(booking3 instanceof Booking == true);

}
```

PROBLEMS AND SOLUTIONS

Onur – GIT

Dan – Jenkins

Andy – JS/CSS

Shai - GIT

Git → Remember to keep local repo up to date before attempting a push

Jenkins → Double check jenkinsfile syntax and Linux file permissions

JS/CSS → Ensure functions are pointing to the correct classes when using DOM manipulation

Git → Consistent pulls and not forcing pushes

A LOVELY DEMO

We're going to show off our product now, how lucky are you guys ?!?!

REFLECTION AND LOOKING FORWARD

Working with a team

Group GitHub

Confidence in diving into a new project

Using Scrum

Realisation of learning

THANK YOU

Team Runtime Terror

https://github.com/shailynch/QACinema