Part 2 - (2)

1. Solution Design

Based on the findings from the requirements analysis report and the business needs of the client.

1. Define the problem: To enable customers to browse available films, find showtimes, and buy tickets, Tongariro Cinemas requires a website.

2. Gather requirements: The website should allow users to search movies by title, genre, or date. Users should be able to select a movie and view available showtimes. Users should be able to select a seat and purchase tickets. The website should be easy to use and accessible on mobile devices.

3. Analyse the requirements: Modern web technologies will be used to build the website, and it should be scalable to accommodate large traffic volumes. It will be integrated with the new ticketing and payment platforms for the cinema. Regulations governing data privacy must also be followed.

4. Create a high-level design: The website will consist of a front-end user interface built using ReactJS or similar framework. The back-end will consist of a RESTful API built using NodeJS or similar technology. The database will store movie and showtime data and be built using MySQL or similar technology. The website will be hosted on a cloud platform such as AWS.

5. Develop detailed designs: The user interface will be designed using responsive web design principles and optimised for mobile devices. The API will be designed to handle user requests and integrate with the cinema's new systems. The database will be designed to store movie and showtime data, as well as user data for ticket purchases.

6. Test your design: The website will be tested to ensure that it is responsive, functional, and secure. User acceptance testing will be performed to validate that the website meets user requirements.

7. Document your design: The design will be documented in a clear and concise manner. This will include technical specifications, user manuals, and operational procedures.

8. Implement your design: The website will be created and then launched in a live environment. Practices for continuous integration and deployment will be used to guarantee that the website is always safe and secure.