

Burger Case Assignment

Tamás Péter

My Goals

- Include process and problem solving
- Focus on parts relevant to position
 - System architecture
 - Component based development
 - Data fetching concepts

Agenda

- Interpreting the problem
- Designing UI
- System diagram / architecture
- Technology choices
- Frontend planning (layout, components etc.)
- Code, implementation details
- Testing
- Improvements, project future

First Things First

You are working on a new social platform for burger fanatics where users can review local burger places, scoring them based on taste, texture, and visual presentation. Users can also upload pictures of their burgers to entice fellow burger enthusiasts.

On the platform, users can find nearby restaurants with burgers on the menu and read information about location and opening times. The new Burger Frontend 1.0™ (trademark pending) is designed to be accessible on multiple platforms, both mobile and web.

Outline the overall architecture, including hosting in a cloud setup, and implement the web part of the social platform. Tie it all together in a presentation that will be the base of discussion for the interview.

The application must integrate with the Burger Backend 1.0™, which is implemented through a set of microservices. The development of the Burger Backend 1.0™ is beyond the scope of this case; however, reflections on its potential structure are appreciated.

Prioritizing requirements

1. As a user I want to choose a restaurant from the **map*** so I can navigate to their page
2. As a user I want to see information about the restaurant so I can read about the menu, rating and reviews
3. As a user I want to review the restaurant, so others can see my opinion
4. As a user I want to upload pictures of my burgers to the **restaurants page**, to entice fellow burger enthusiasts

Visualizing Data

Burgers


PagePagePageButton

Burger Shock

OPEN: 8:00 - 23:00

Rating: 4.3


Burger Places



Burger Shock

Body text for first product


Rating: 4.3



Mr. Daniel

Body text for second product

Rating: 3.5



Burger Ideas

Body text for third product

Rating: 4.9

Restaurants:


[
"burger-shock",
"mr-daniels",
"burger-ideas"
]

Data Fetching, Interaction Design

Visualizing Data

Burgers

PagePagePageButton



Burger Shock

Subheading

Overall Score: 4.6

Grilled Burgers with crispy onions. Come and taste the freshness of ...

Give Score


Text box for additional details or fine print

Taste: 4.3 Texture: 4.2 Visual Presentation: 4.8

Texture: 4.2

Visual Presentation: 4.8


Menu Items



Product

Body text for first product


\$10.99



Product

Body text for second product

\$10.99



Product

Body text for third product

\$10.99

Ratings

Product

Body text for first product

\$10.99

Product

Body text for second product

\$10.99

Product

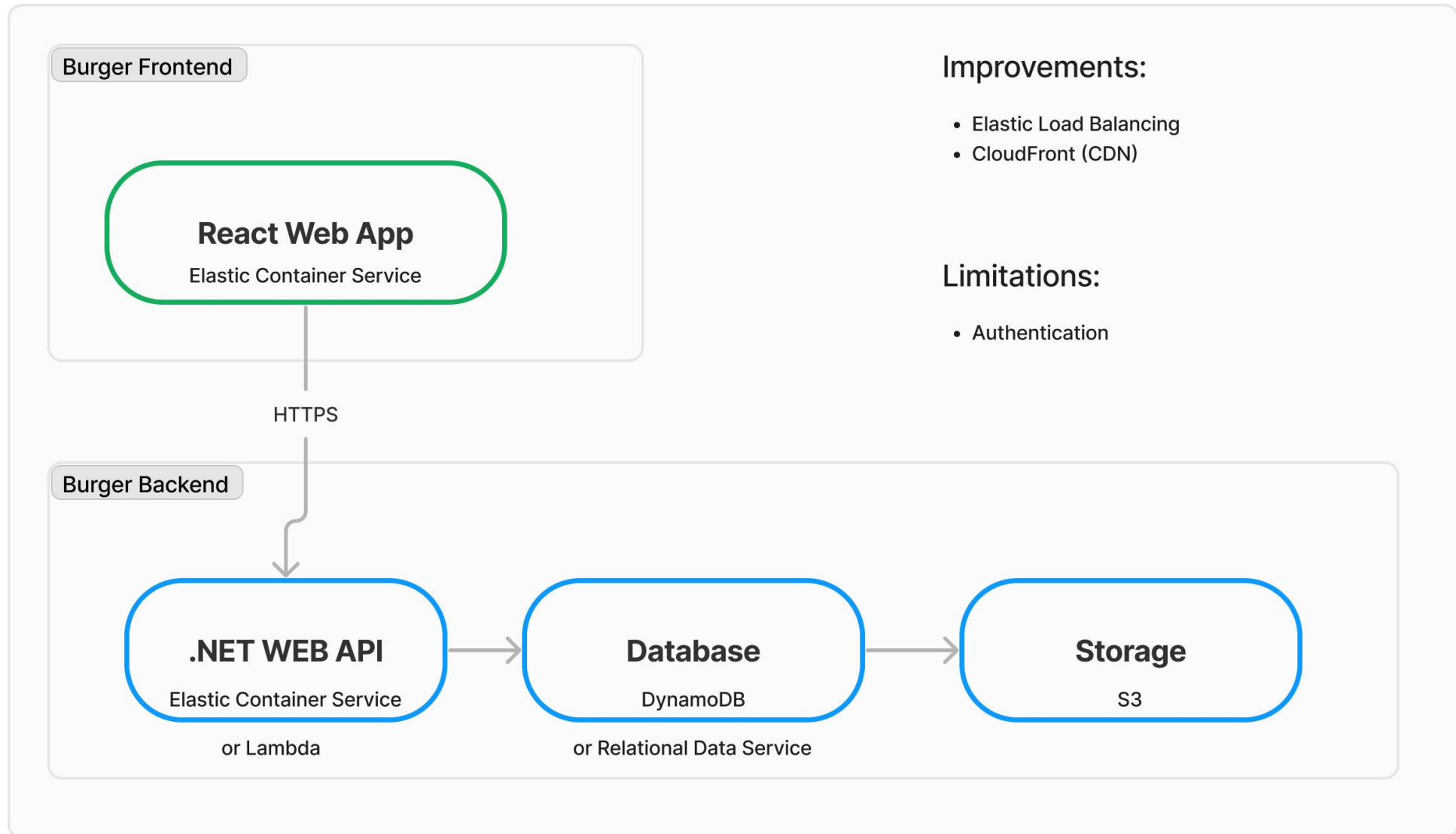
Body text for third product

\$10.99

```
"id": "burger-shock",
  "name": "Burger Shock",
  "image": "/images/burger-shock.jpg",
  "rating": 4.4,
  "menuItems": [
    {
      "id": "cheese-burger",
      "name": "Cheeseburger",
      "price": 5.99,
      "description": "A classic cheeseburger
with lettuce, tomato, and pickles."
    },
    ...
  ],
  "reviews": [
    {
      "id": "review-1",
      "name": "John Doe",
      "rating": 5,
      "comment": "Great burgers!"
    },
    ...
  ]
}
```

Data subset fetching or secondary index

System Diagram



Images, Read-heavy vs Write-heavy

Technology Choice

- React with TypeScript
- Next.js
 - Project (SEO, data fetching)
 - Position
 - Personal
- Cypress.io

Components

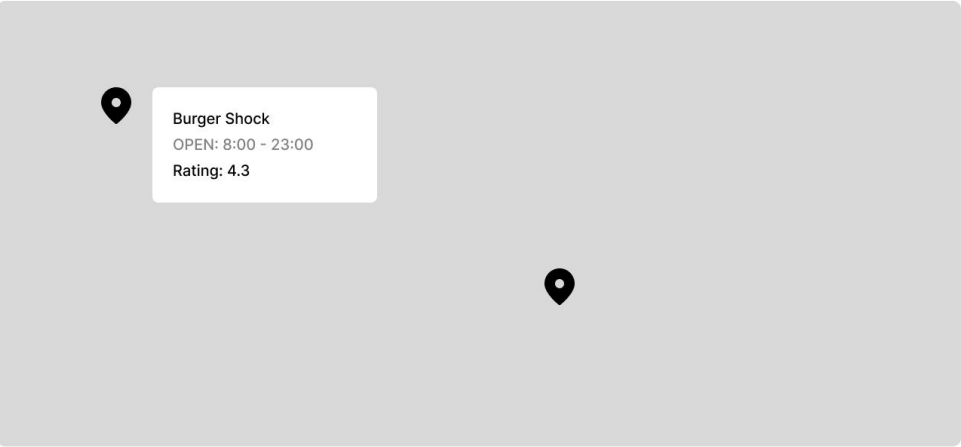
Burgers

Page

Page

Page

Button



Burger Places



Burger Shock
Body text for first product
Rating: 4.3



Mr. Daniel
Body text for second product
Rating: 3.5



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Burgers

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Product
Body text for second product
\$10.99

Product
Body text for third product
\$10.99

Components

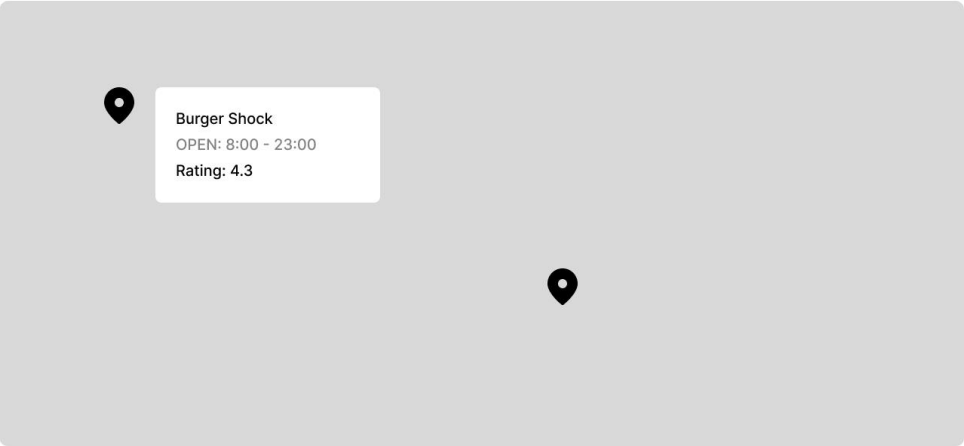
Burgers

Page

Page

Page

Button



Burger Places



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Body text for third product
\$10.99

(reusability, children components, flexibility)

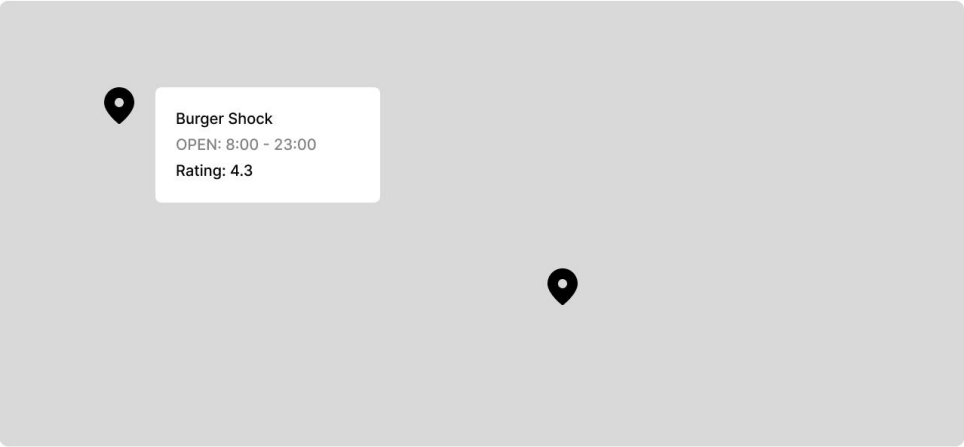
Components

```
TitleDescriptionProps): JSX.Element => {  
  return (  
    <div style={{...containerStyles, ...style}} {...props} >  
      <h2 style={{...titleStyles, ...titleStyle}}>  
        {title}  
      </h2>  
      {description &&  
        <p style={{...descriptionStyles, ...descriptionStyle}}>  
          {description}  
        </p>}  
      {children &&  
        <div style={{...childrenStyles, ...childrenStyle}}>  
          {children}  
        </div>  
      }  
    </div>  
  )  
}
```

Components

Burgers

Page Page Page Button



Burger Places



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Mr. Daniel
Body text for second product
Rating: 3.5



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\$10.99

(Naming, reusability vs separation of concerns, globally available components)

Components

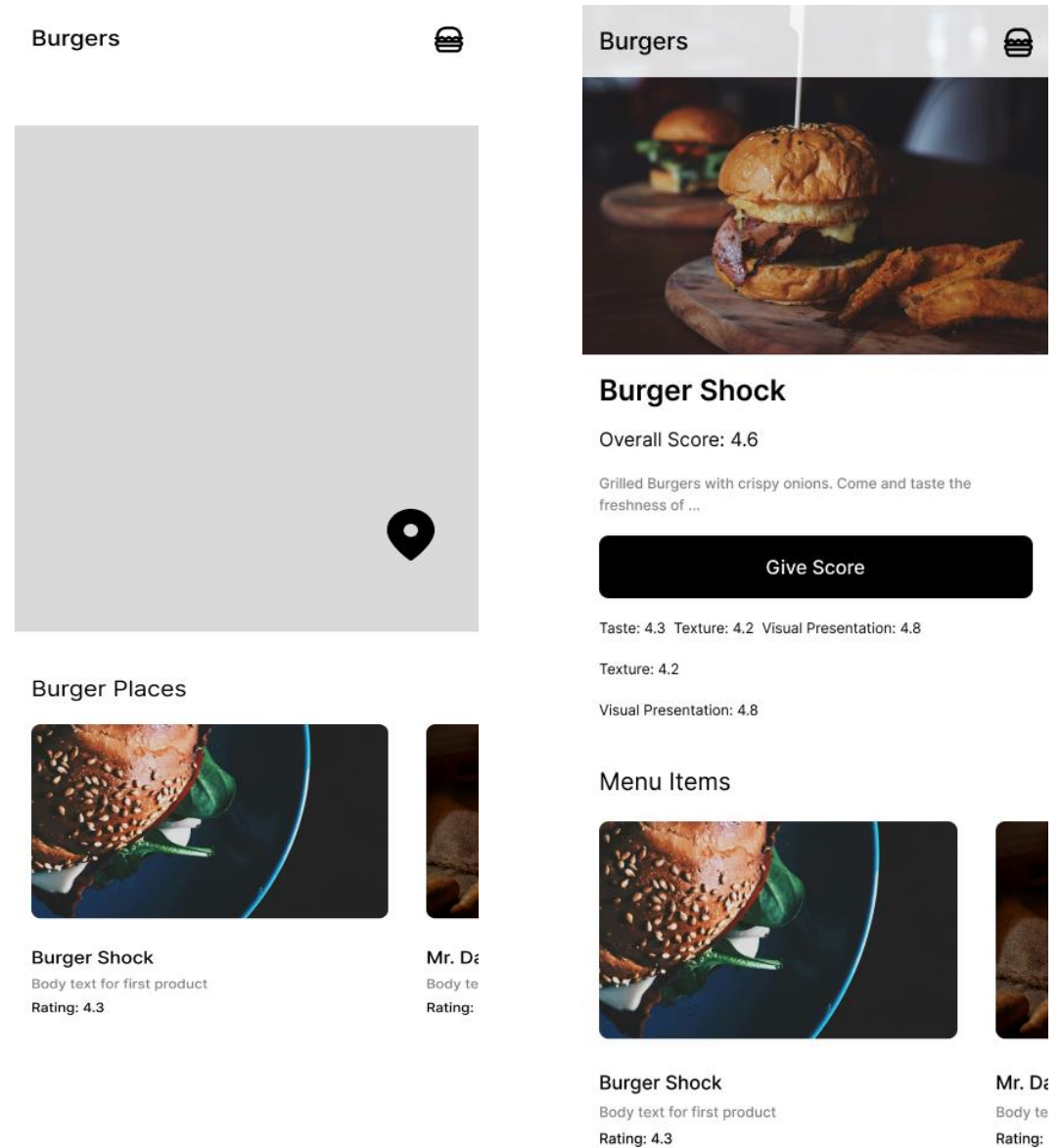
```
ProductCardProps): JSX.Element => {
  const [loading, setLoading] = React.useState<boolean>(true);
  return (
    <Card>
      {imageSrc ? (
        <div style={imageWrapperStyles}>
          <Image src={imageSrc} alt="Burger" fill style={imageStyles} />
        </div>
      ) : (
        <div style={imageWrapperStyles}>
          <p>loading</p>
        </div>
      )}

      {title && description ? (
        <TitleDescription title={title} description={description} style={titleDescriptionStyles} >
          {price && <p style={priceStyles}>{price}</p>}
        </TitleDescription>) : (
          <p>Loading...</p>
        )}
    </Card>
  )
}
```

Improvement: Export inner part as a Layout component

Responsiveness

- Mobile First Design
- Next Image Component
- Loading skeletons



Layout responsiveness, Dynamic image resolution

Project Structure

- Folder structure
- Component file structure
- Providers

Component Tests

- Nested Components



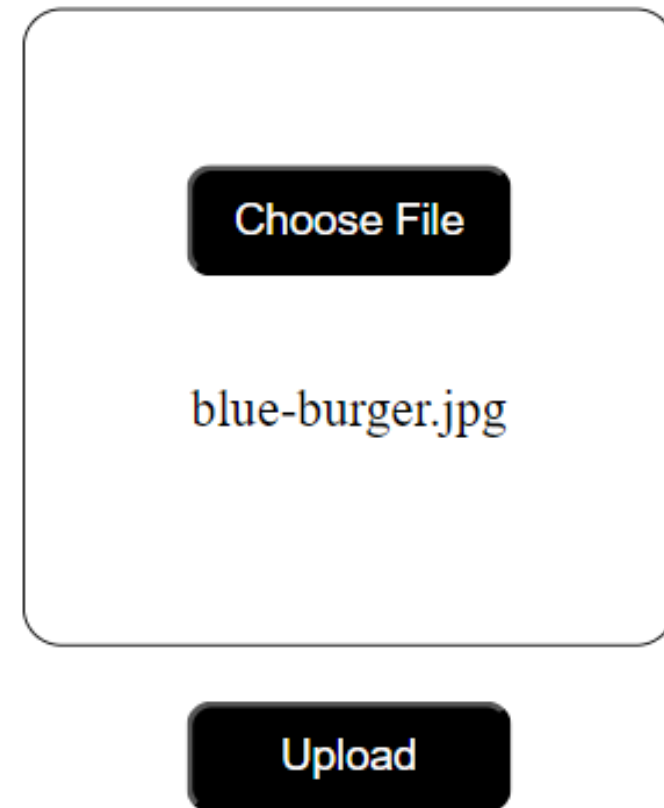
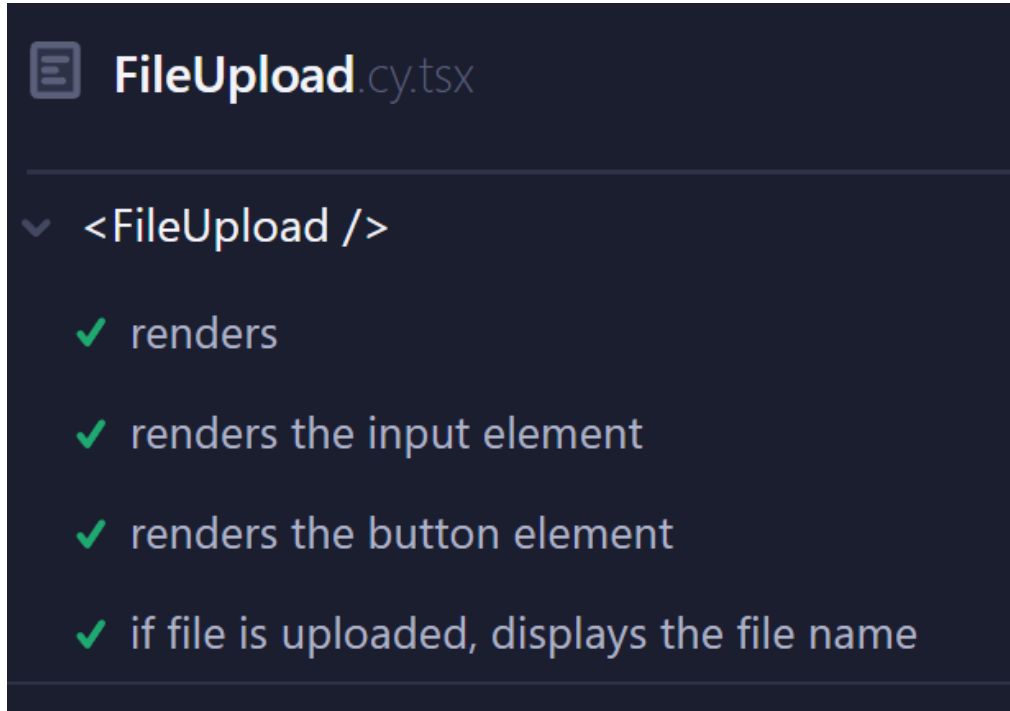
John Doe

Good one

Rating: 3.5

Component Tests

- Async tests



Future tests, challenges of testing (conditional tests)

Improvements & Project Future

- User authentication
- Security concerns
- Data fetching optimization
- Implementation of Cloud and CI/CD
- Finalize the UI design and stick with it
- More testing

Discussion

- Questions
- Potential topics:
 - Security
 - Version Control
 - CI / CD
 - TypeScript
 - Microservice Architecture
 - Animations