APPLICATION DESIGN STUDIO

TEAM-18

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PROBLEM STATEMENT

An enterprise is a complex ecosystem comprised of numerous applications that engage in interactions, either through direct connections or via a middleware platform.

While navigating the dynamic landscape of an organization, several significant challenges and issues emerge :

- Lack of readily available views for quick and easy reference
- Hindering the ability to understand the intricate connections between various applications.
- Tracking the specific types of data flowing through these interconnected systems and data related to the applications and middleware

SOLUTION

Expected outcome

To create a web based editor to model the individual data flow between applications , with ability to visualize the data

Our solution to it

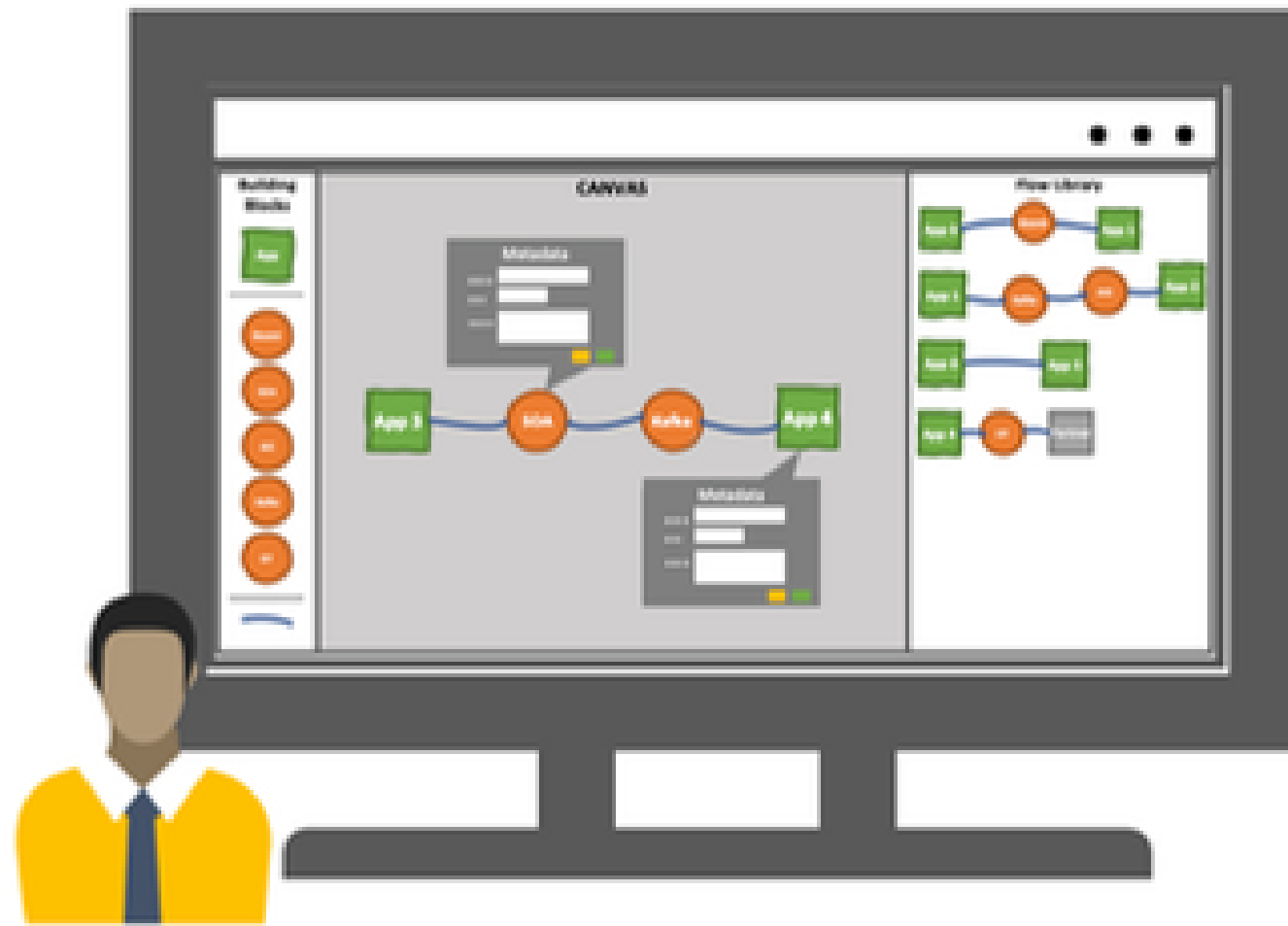**ADS -Application design studio**

Models the data flow

↓

View the data flow
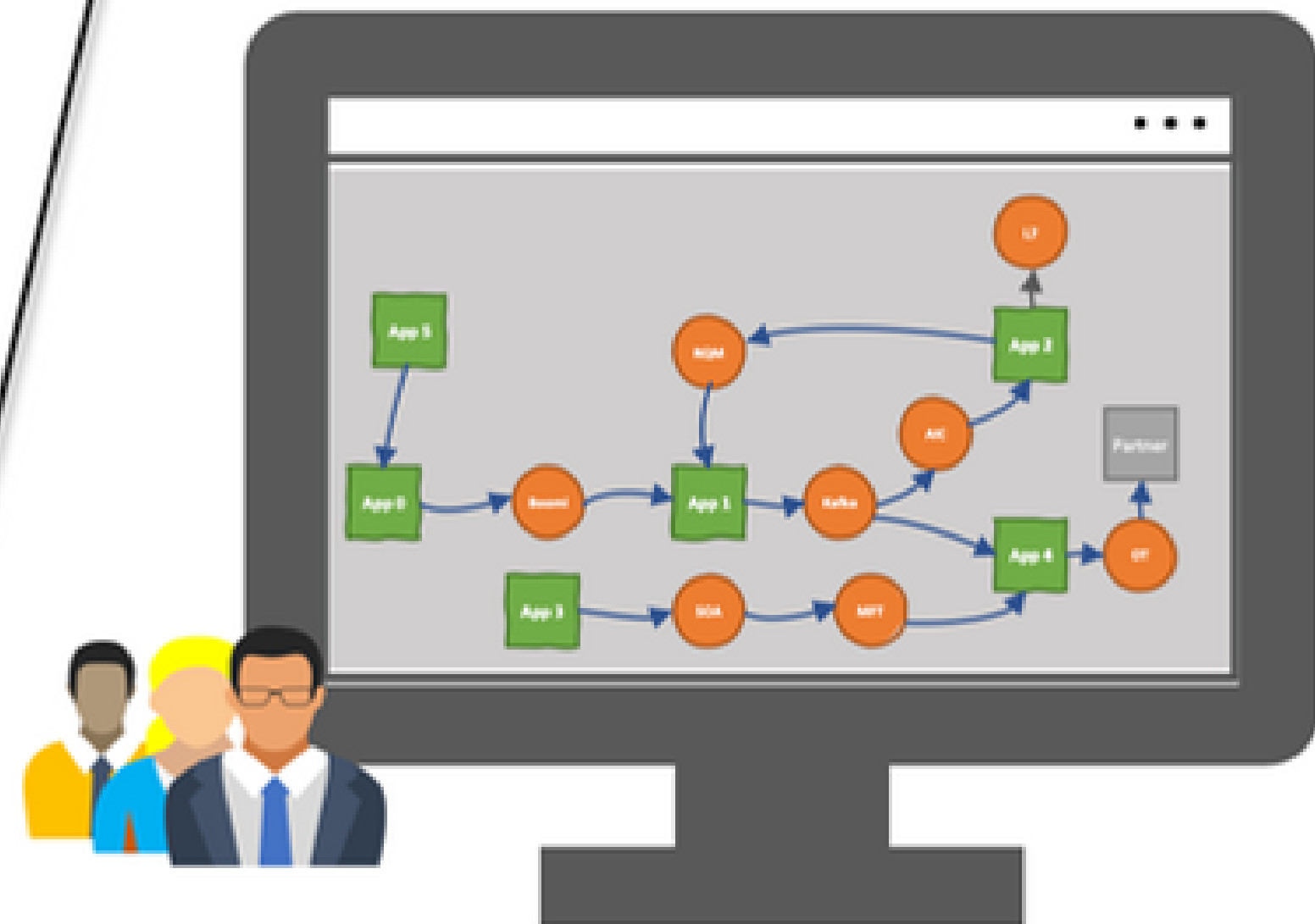
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CRUD operations

OBJECTIVES

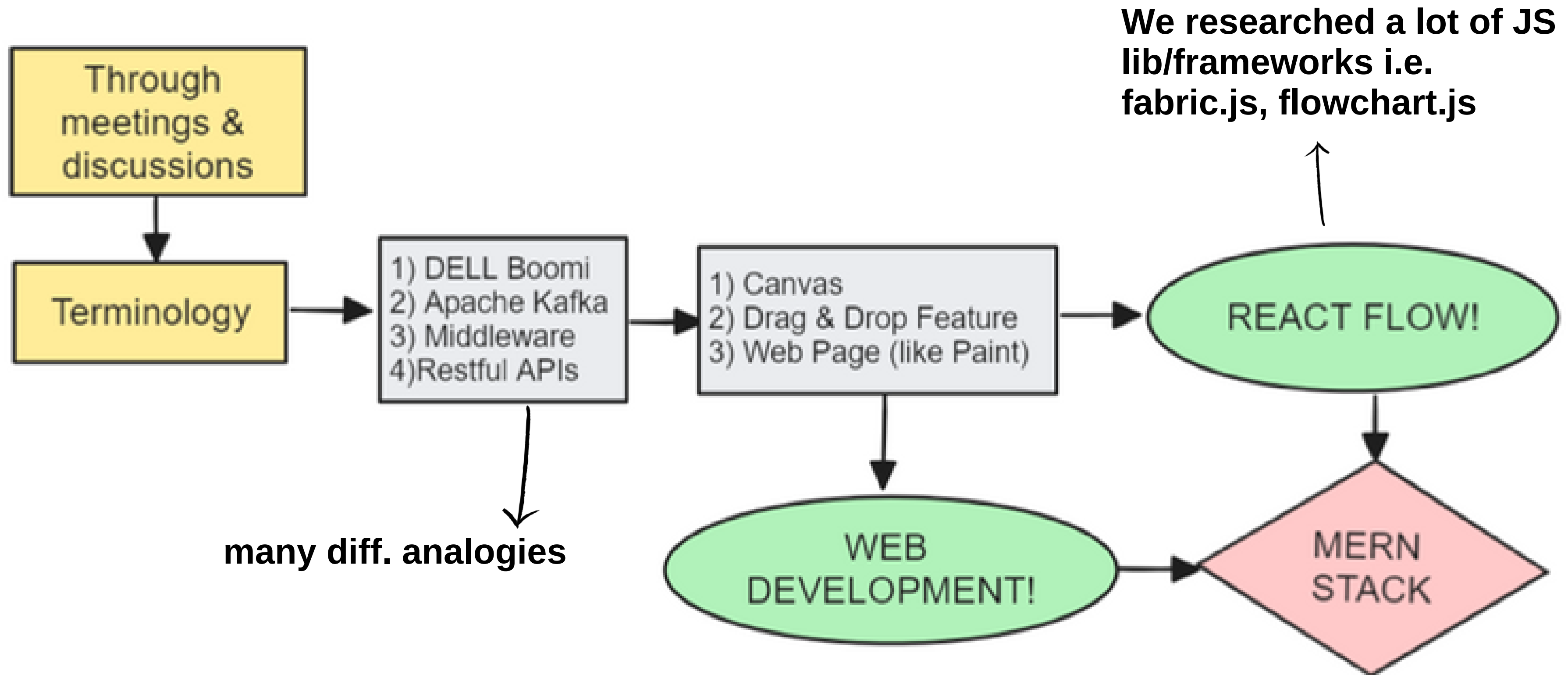C[reate] U[pdate] D[elete] Mode

Creating App to App Flows

VIEW Mode

- Developer(s) to build/ manage individual data flow representation.
- User to view & filter the consolidate data flow view.
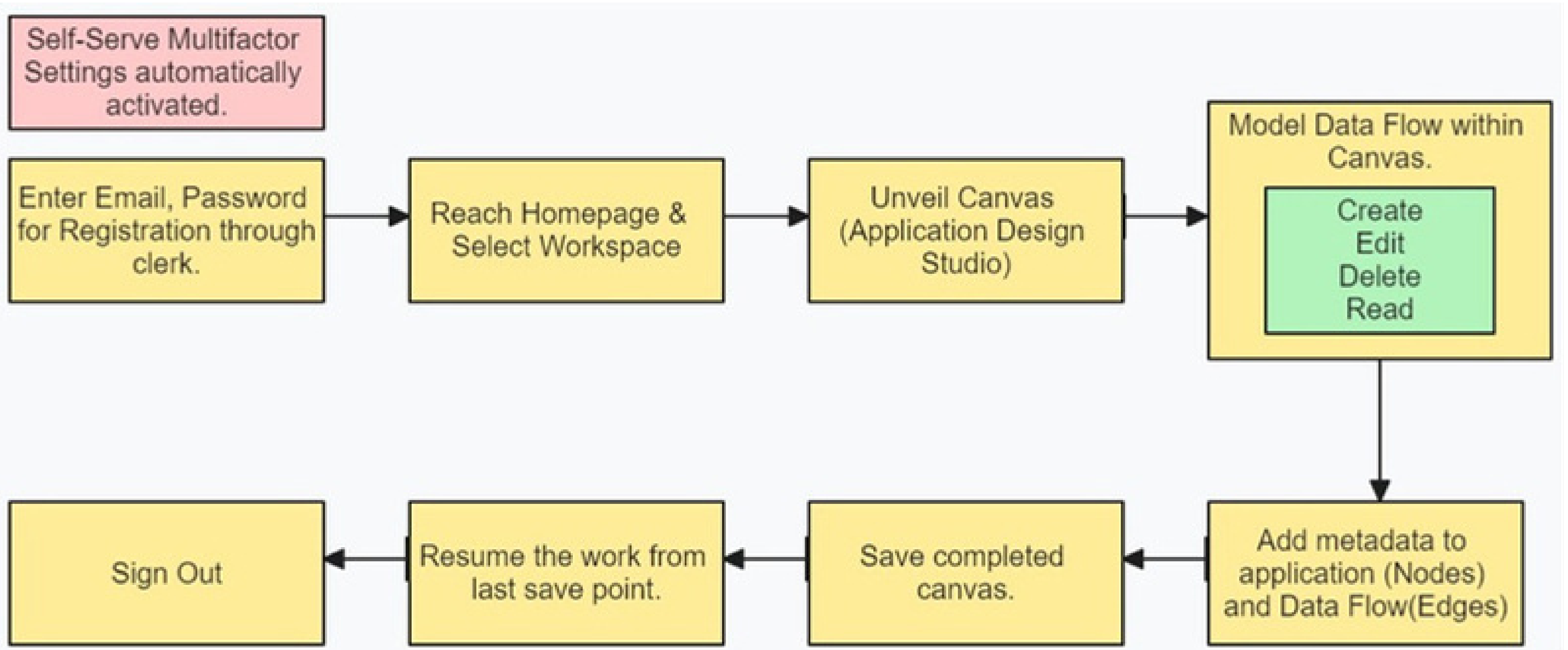- Upload the current data flow.
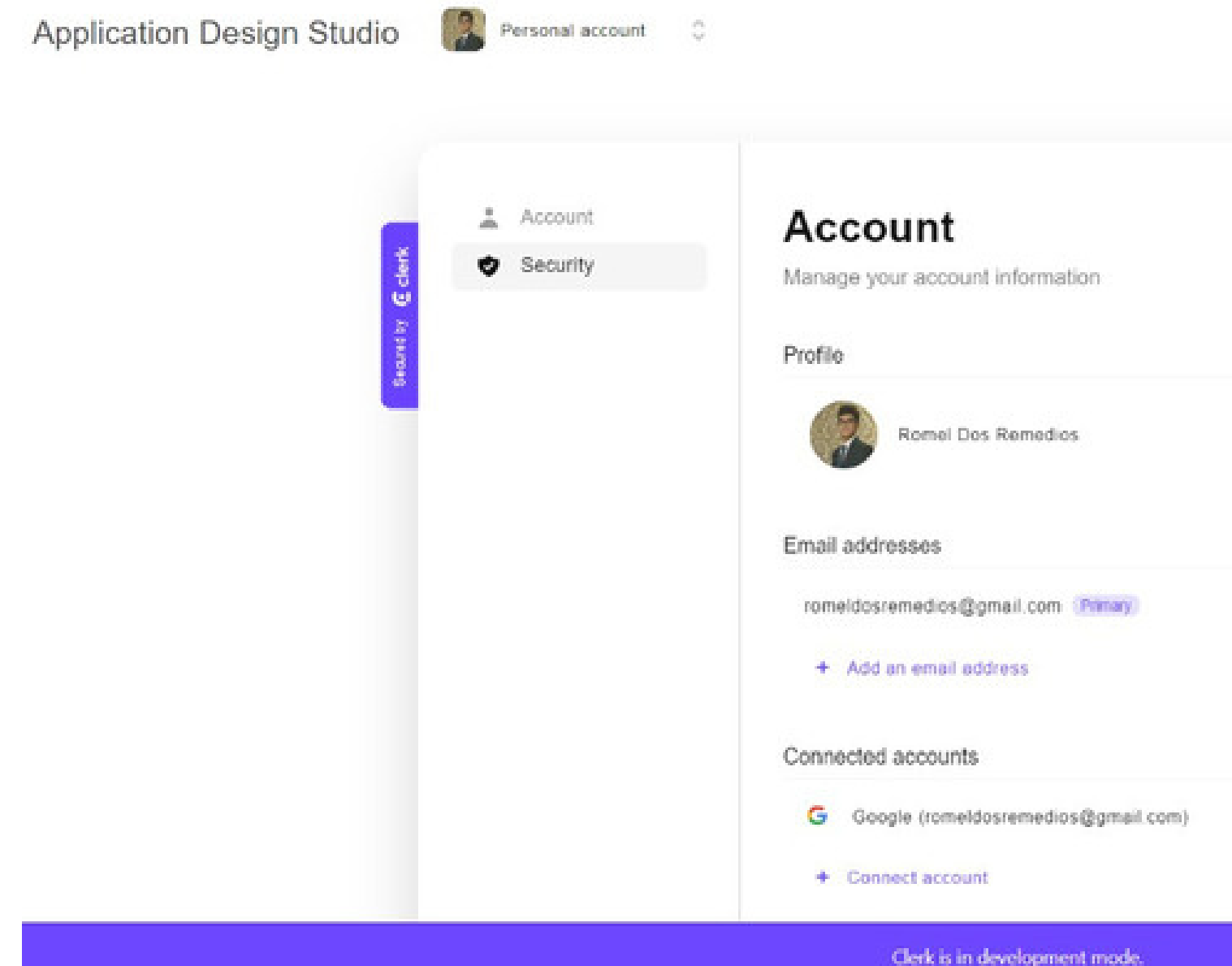
APPROACH

PROCESS FLOW

UNIQUE FEATURES

- **User Profile:** Users can create and track their profiles across multiple systems.
- **Authentication:** Email and Google authentication, with a verification code provided during signup.
- **User-Friendly Design:** Simple and intuitive UI, minimizing clicks for efficient navigation.
- **Design Flow:** Enables smooth modeling with drag & drop features, control panels for zooming, locking, and adding/viewing metadata of nodes and edges. Includes a mini-map for overview.

AUTHENTICATION

Sign in

to continue to Team18

G Continue with Google →

or

Email address

[   ]

CONTINUE

No account? Sign up

Team18

Verification code

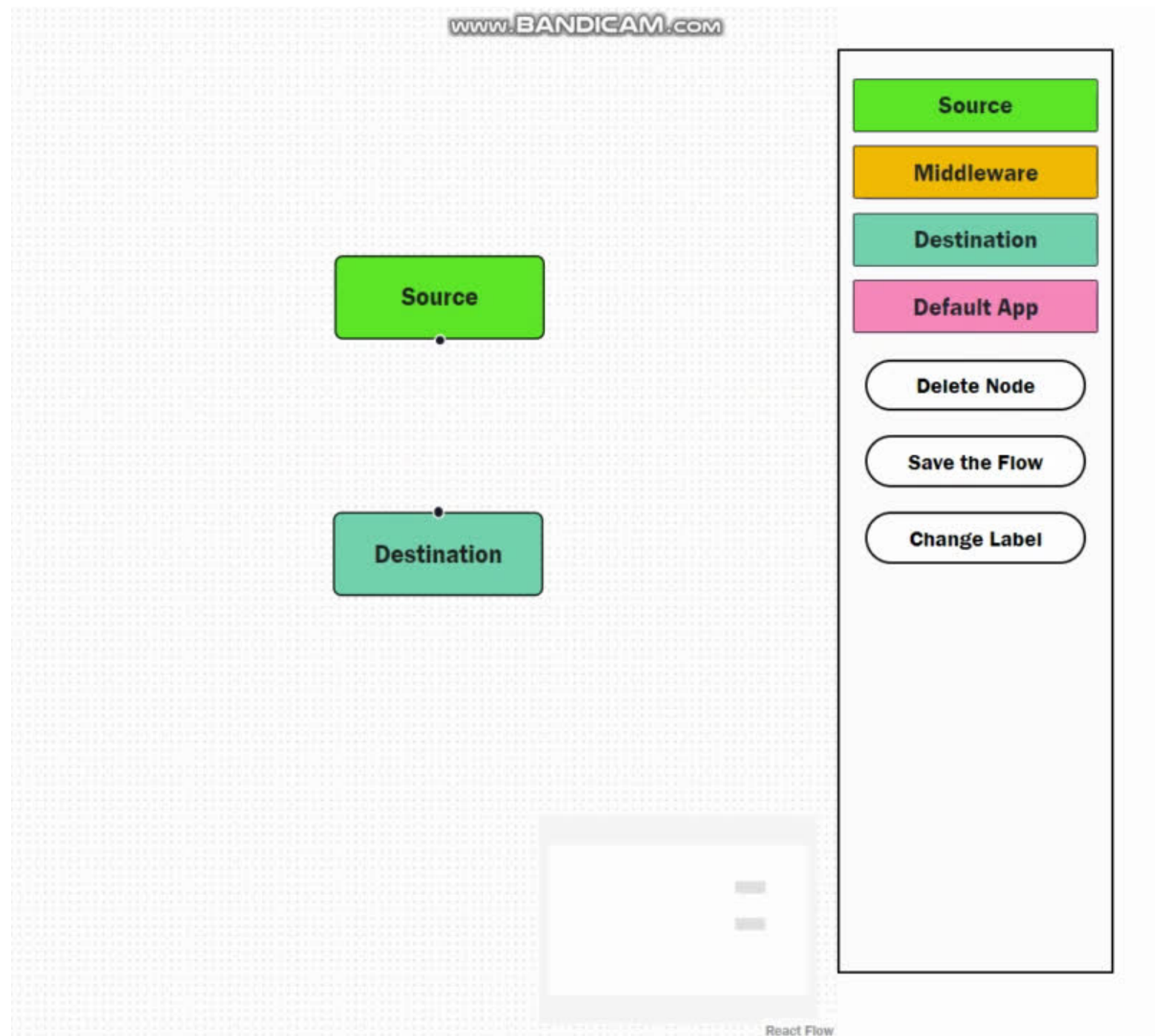Enter the following verification code when prompted:
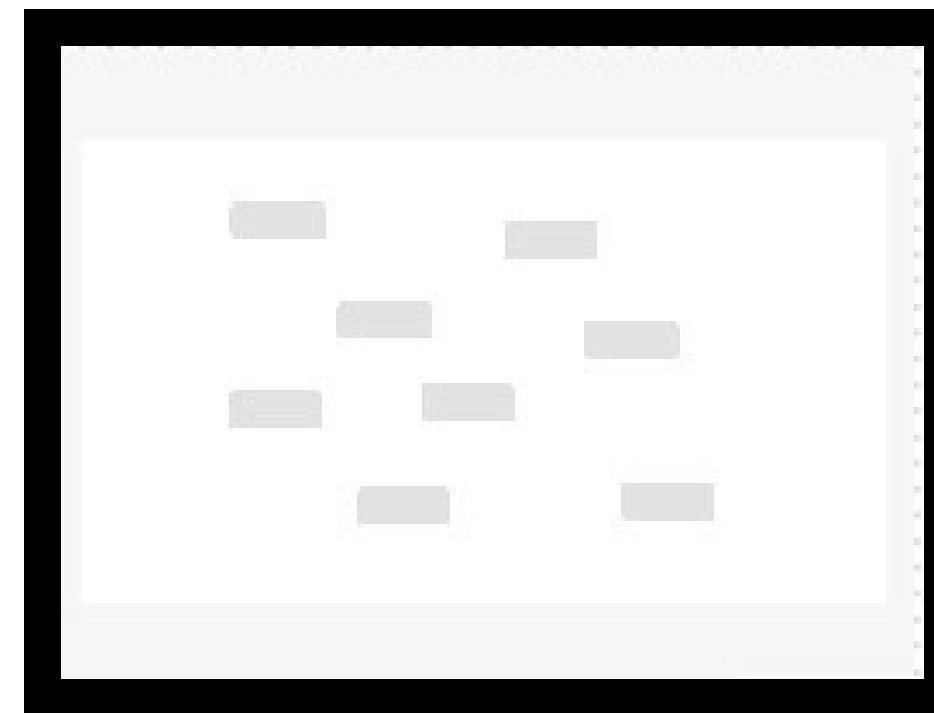
422287

To protect your account, do not share this code.

ADVANTAGES OF CLERK

- **Provides embeddable UIs**
- **Flexible APIs**
- **Admin dashboards to authenticate**

CANVAS-FUNCTIONALITY

DRAG AND DROP

MINIMAP

ZOOM IN

ZOOM OUT

VIEW

LOCK SCREEN

TECH STACK

FRONTEND

 html5

 css

 javascript

 react

React and its libraries

- **React is lightweight and easy to intergrate libraries (React Bootstrap, React Router)**

- **React uses JSX syntax which enables usage of HTML**

TECHNOLOGIES USED

NodeJS

Enables usage of JS for both front and backend

Asynchronous operations can be handled

Active updates and community

MongoDB

NoSQL database that uses a flexible

Schema-less data mode

Real time updates

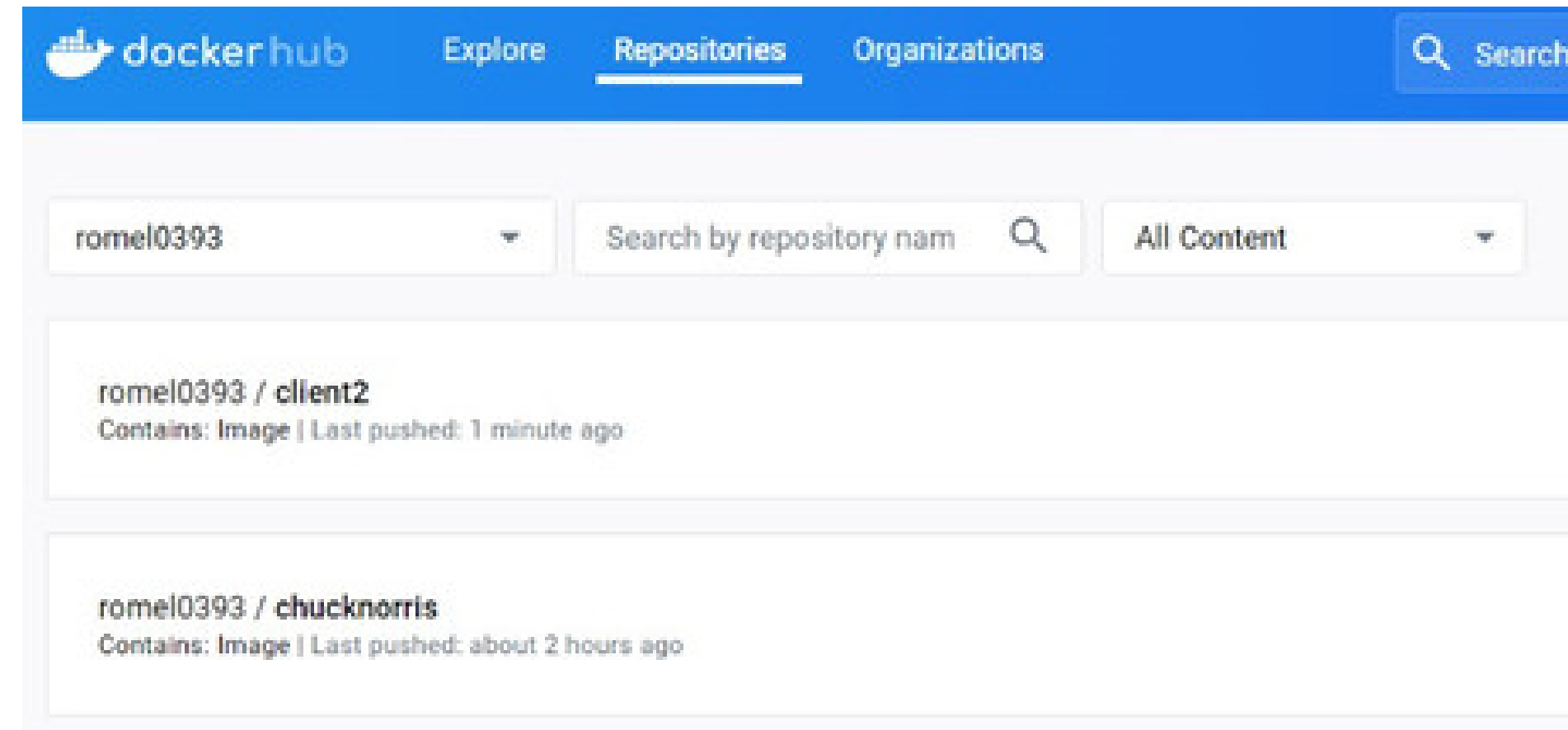**Stores data in BJSON format which closely relates to Json (by react)**

DEPLOYMENT STRATEGIES
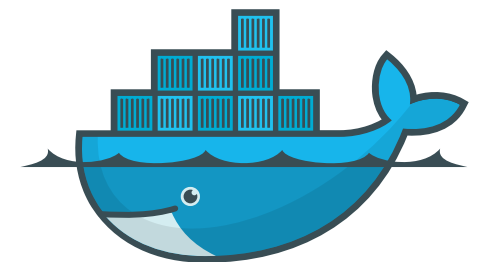
Docker and Kubernetes

Ensures consistent behavior across

different environments

Lightweight as they share OS kernel

Kubernetes automates,deployment scaling reducing

manual intervention

FUNCTIONAL & NON-FUNCTIONAL REQ.

1. **User Authentication: clerk**

2. **Data Management**

3. **User Interface: Canvas**

4. **Real-Time Updates**

5. **Deployment**

1. **Performance : Response times for CRUD operations**

2. **Maintainability**

3. **Usability**

CHALLENGES

Familiarity with technology.

Learning from the ground up.

Navigating authentication complexities.

Doube-click functionality issues in the

canvas (used timeout time)

online (lack of face-to-face communication)

LEARNINGS AS A TEAM

Tech Learning: Explore new technologies and strategies collaboratively.

Patience and Brainstorming: Foster patience and engage in idea brainstorming sessions.

Tech Stack Research: Investigate and identify the most suitable tech stack.

Continuous Learning Challenge: Encourage daily challenges to learn new things.

Team Collaboration: Emphasize effective collaboration with diverse developers and peers.

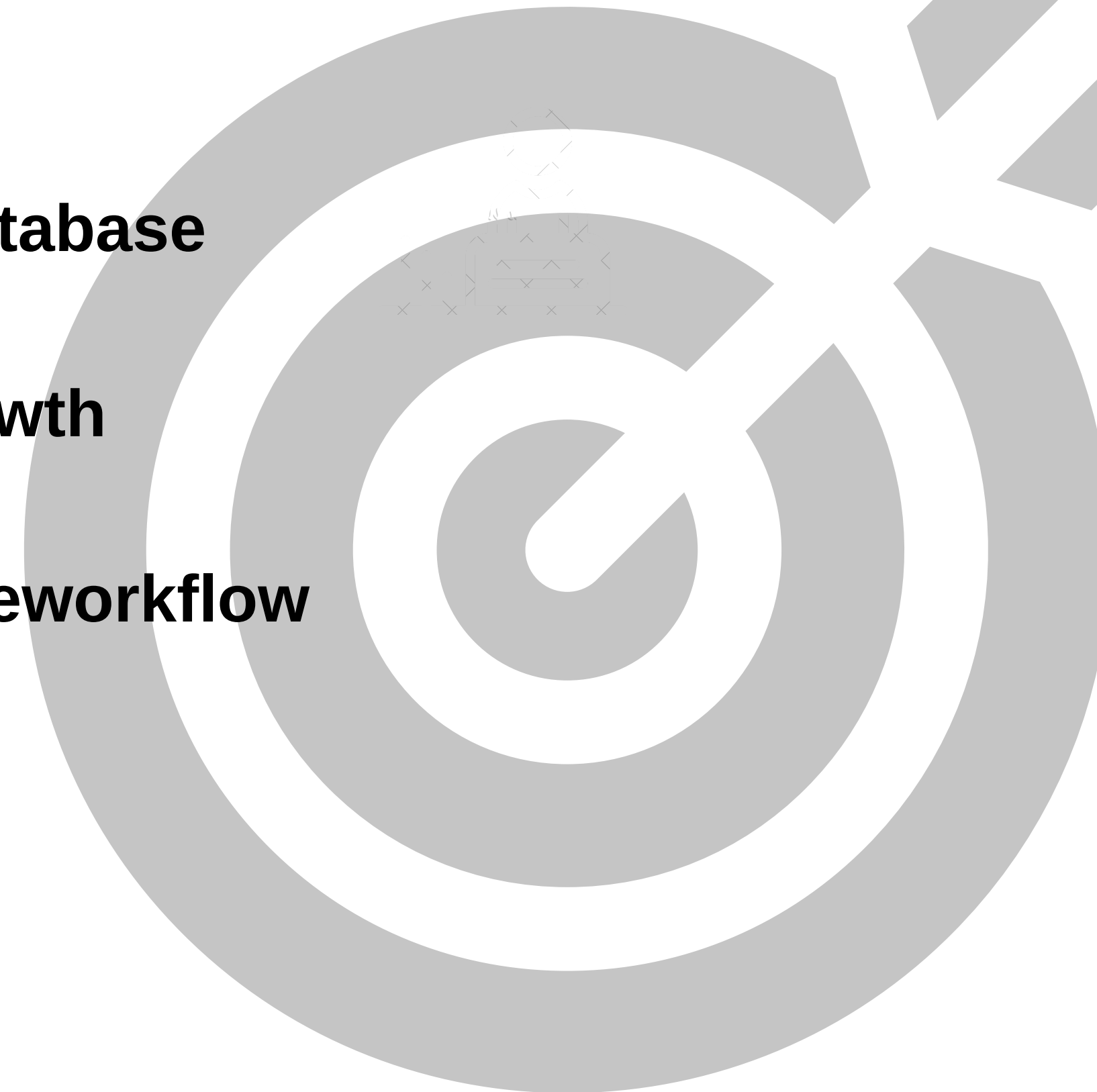**Industrial Guidance:** Provided with industry-level guidance and opportunities to solve real-world problems.

FUTURE SCOPES

Sync third party database to local database

Enhance scalability for future growth

Develop the capability to create multipleworkflow pathways.

Strengthen security measures.

THANK YOU !
Q/A SESSION