

#### PROJECT PRESENTATION

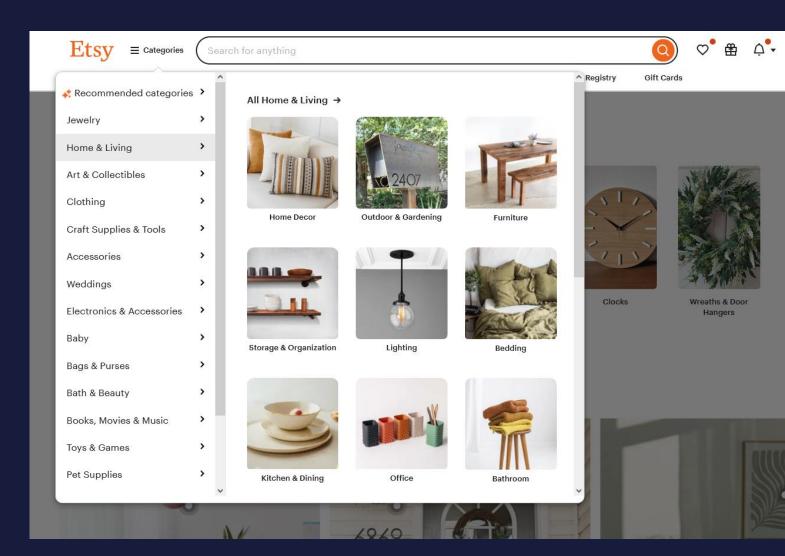
WEB DEVELOPMENT II

Tamara Plante | Dong Huang | Iana Setrakova

#### PROJECT PURPOSE

Marketplace for Unique Products

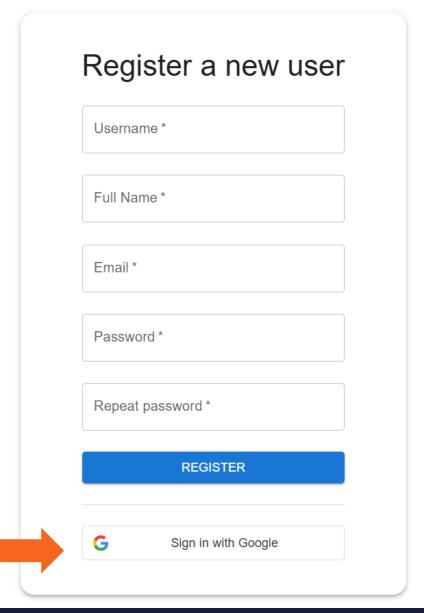
- Connect Creators and Shoppers
- Easy Browsing
- Enhance the Shopping Experience

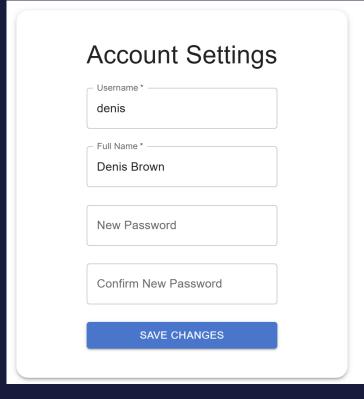




Features and Functionalities

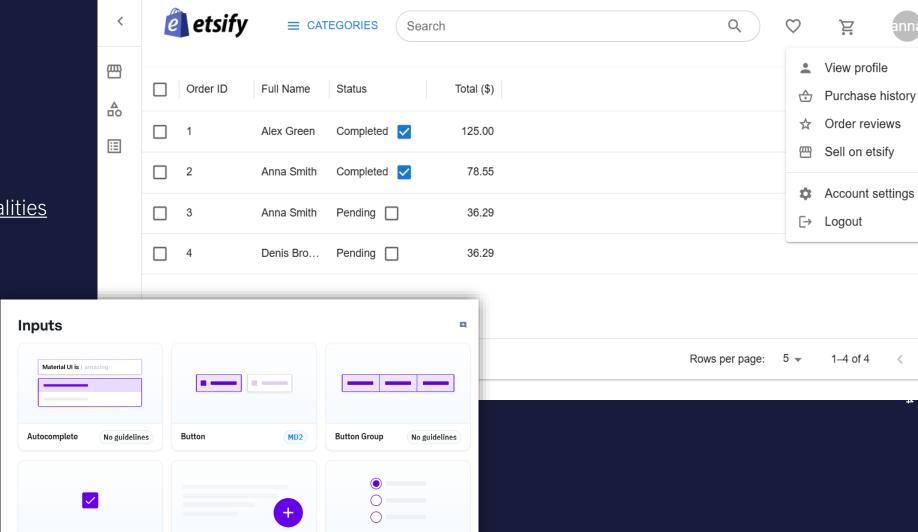
- Google Sign-In Authentication
- Use @react-oauth/google
- Allow the same users to log in with google or password via email





Features and Functionalities

Material UI



Floating Action Button

MD2

Radio Group

MD2

MD2

Checkbox

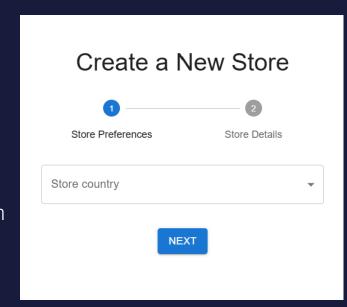
Ä

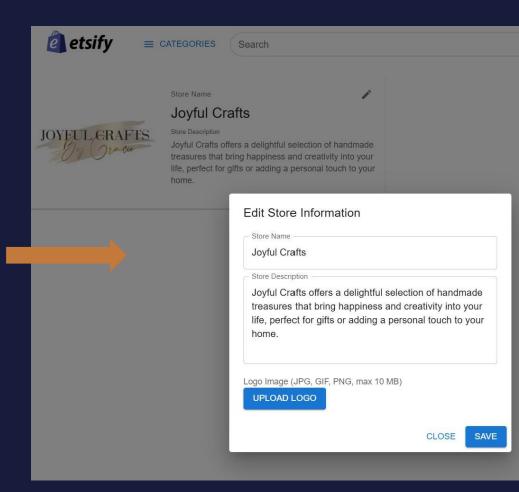
1-4 of 4

Purchase history

Features and Functionalities

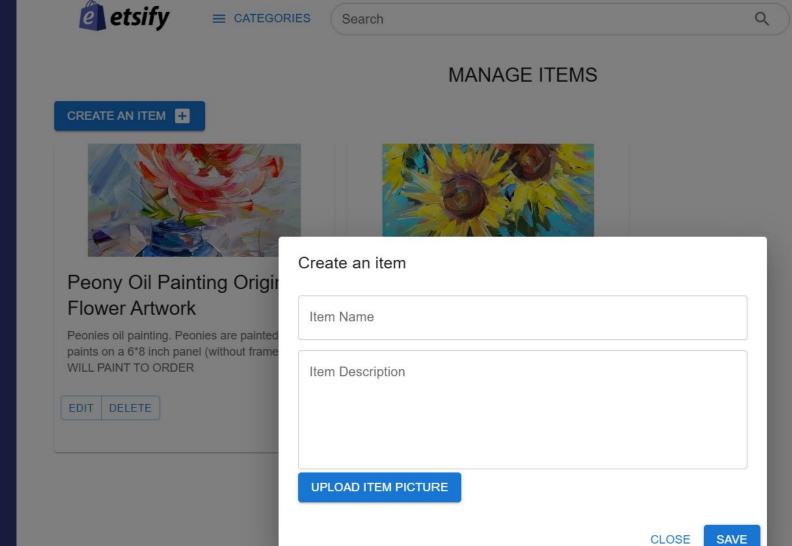
- Dashboard
  - Managing store information





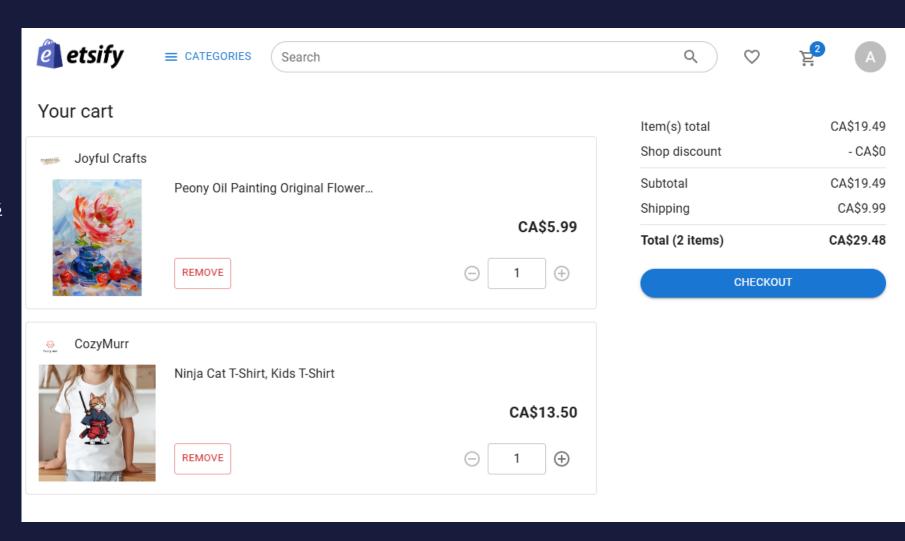
Features and Functionalities

- Dashboard
  - Managing items



Features and Functionalities

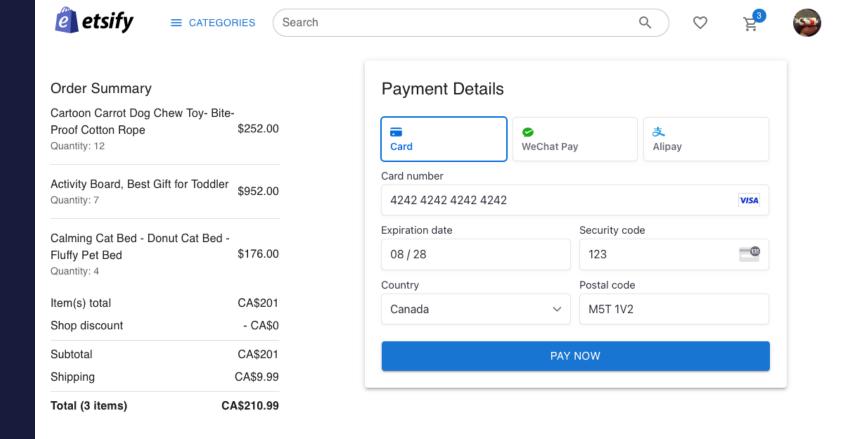
Cart view with a cart badge



#### PROJECT SOL<u>UTION</u>

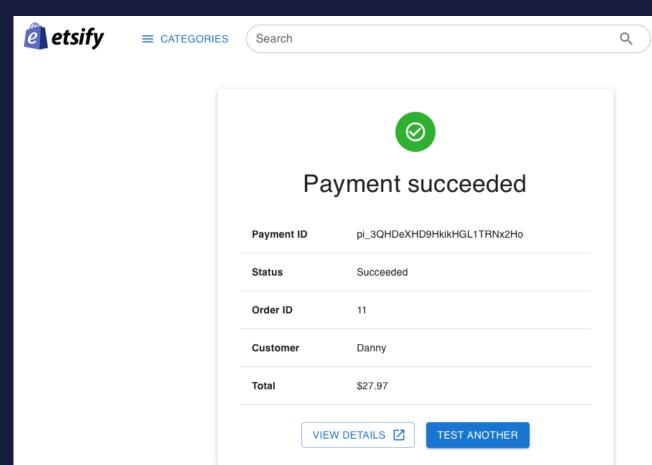
Features and Functionalities

Stripe payment enabled



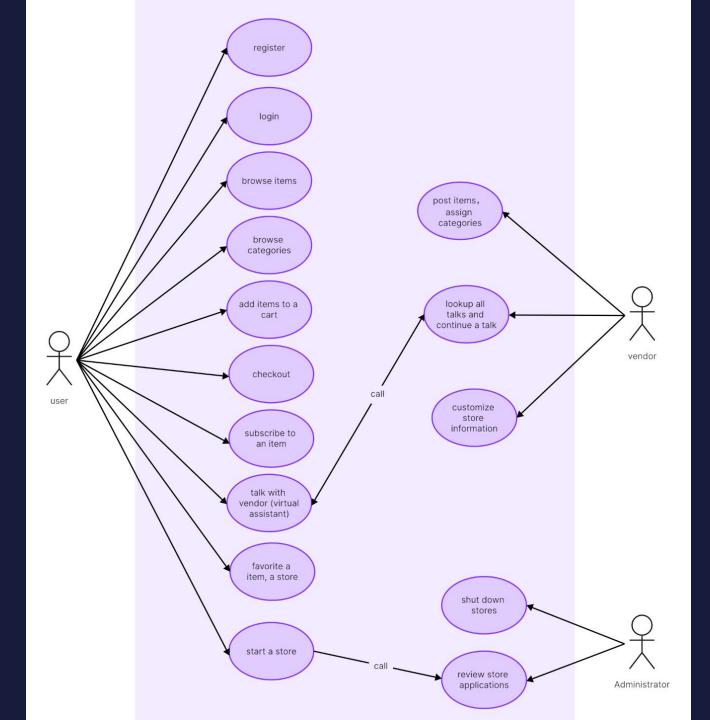
Features and Functionalities

Cart checkout



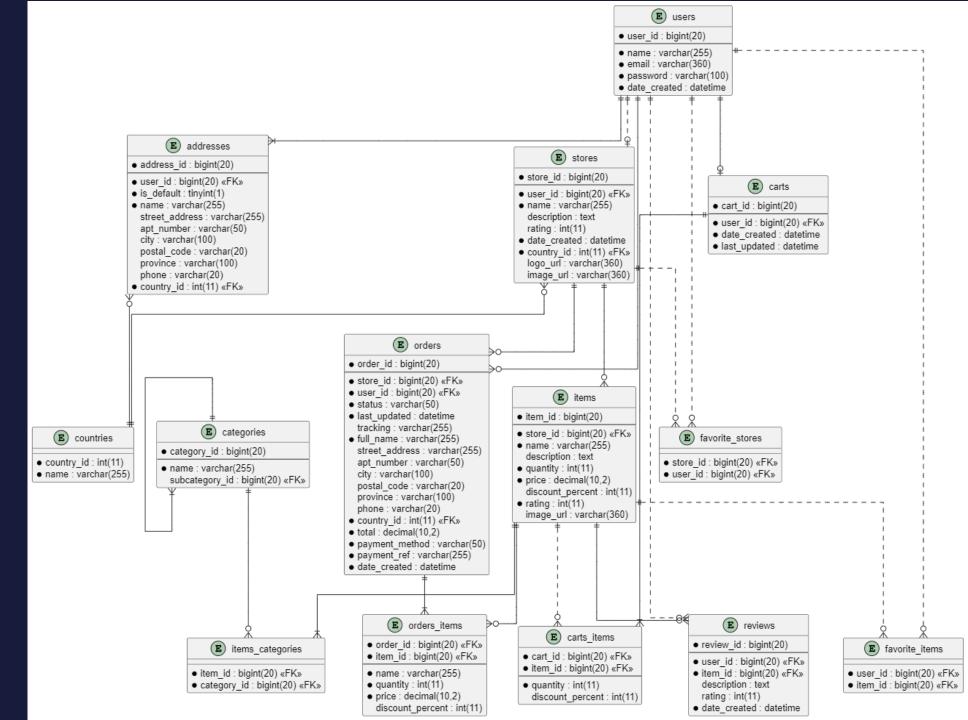
**USE CASE DIAGRAM** 

- User
- Vendor
- Administrator

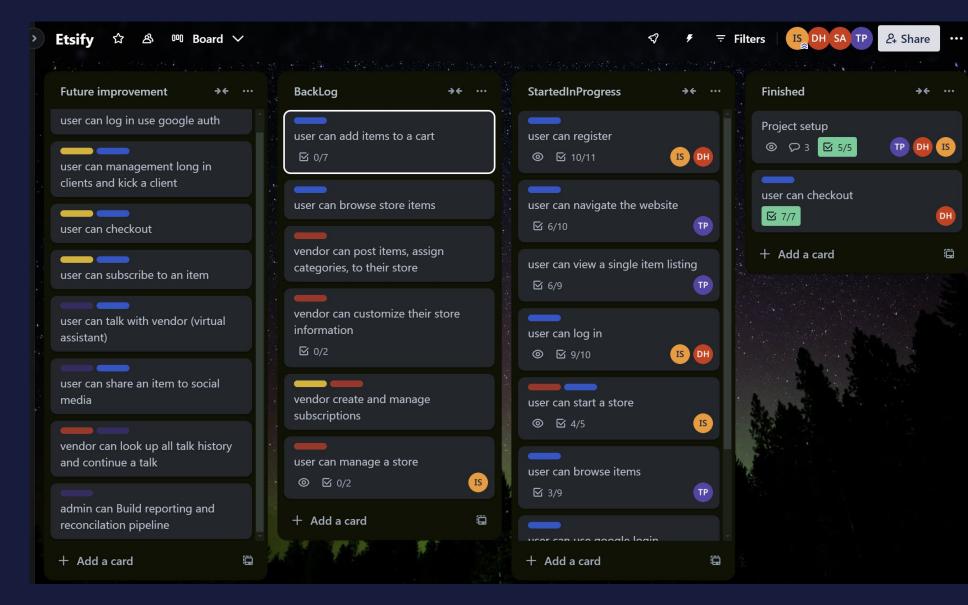


E/R DIAGRAM

Using Sequelize

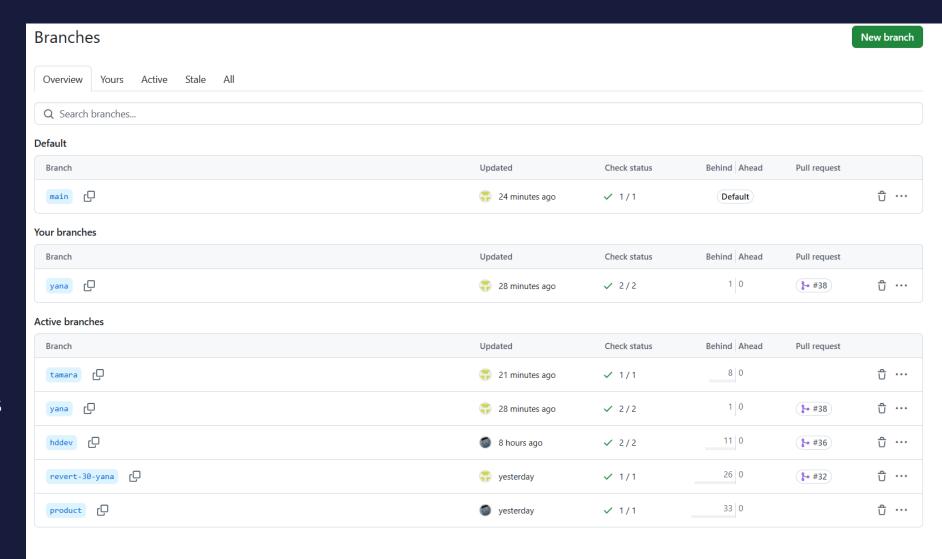


# PROJECT SOLUTION TRELLO



# PROJECT SOLUTION GITHUB

- 2 Projects
- Individual branches
- Product (special)

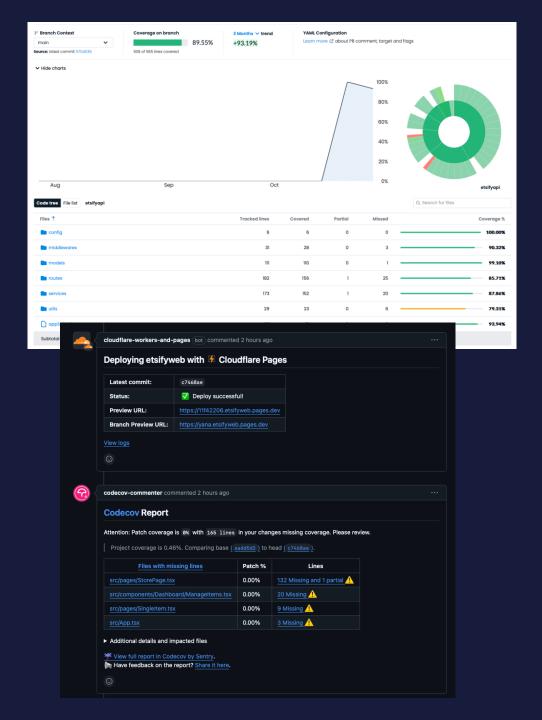


#### Technologies and libraries:

- Vite React, Material UI
- Node.js, Express.js, Sequelize, Jest, supertest
- Cloudflare Pages(Web & CDN) & Heroku(API)
- Database AWS RDS MySQL
- Authentication: JWT
- Google Auth
- Storage: AWS S3
- zustand for State management

#### CHALLENGES AND SOLUTIONS

- CI GitHub workflow
- Code coverage
- Safe





<u>Technologies:</u>

jest Testing

```
describe('POST /api/users/register', () => {
            afterEach(() => {
                jest.clearAllMocks();
            });
it('it should create a new user and return a success message and token', async () => {
                users.findOne.mockResolvedValue(null);
                users.create.mockResolvedValue({
                    id: 1,
                    username: 'TestUser',
   25
                    full name: 'TestName TestFamilyName',
                    email: 'test@example.com',
   27
                });
                const response = await request(app).post('/api/users/register').send({
                    username: 'TestUser',
                    full_name: 'TestName TestFamilyName',
                    email: 'test@example.com',
                    password: 'securePassword',
                });
   36
                expect(response.status).toBe(201);
                expect(response.body).toHaveProperty('success', true);
                expect(response.body).toHaveProperty(
                     'message',
                    'User registered successfully'
   41
                expect(response.body).toHaveProperty('token', 'mockedToken');
   42
            });
```

<u>Technologies:</u>

jest Testing

```
it('should return 500 Internal Server Error when database connection fails', async () => {
const SequelizeConnectionError = new Sequelize.ConnectionError(
  234
                     'Database connection failed'
  235
                );
                stores.findOne.mockRejectedValue(SequelizeConnectionError);
                const response = await request(app)
                     .put('/api/stores')
  241
                     .set('Authorization', `Bearer ${token}`)
                     .send({
  242
                        name: 'Test Store',
                        description: 'Test Description',
                    });
                expect(response.status).toBe(500);
  247
                expect(response.body).toHaveProperty('status', 'error');
                expect(response.body).toHaveProperty(
                     'message',
  250
                     'Database connection failed'
  251
                );
  252
  253
            });
        });
```

Technologies:

function

Persist integration

Simple used in other hook by

```
combine(
                         21
                                   const { login, isLoggedIn } = useLoginStore();
                                  const { authToken } = useLoginStore.getState();
zustand for State Management
   Small, fast state management
   Simple used in page by hook
```

```
login: (authToken: string) => {
               const decoded = jwtDecode<DecodedToken>(authToken)
               set({
                   userId: decoded.userId,
                   email: decoded.email,
                   username: decoded.username,
                   full name: decoded.full name,
                   authToken,
                   isLoggedIn: true,
                   picture: decoded.picture
           logout: () =>
               set(initialState)
       name: 'login-storage',
       storage: createJSONStorage(() => localStorage),
   },
{ name: 'login-store', enabled: true }
```

const useLoginStore = create(

initialState, (set) => ({

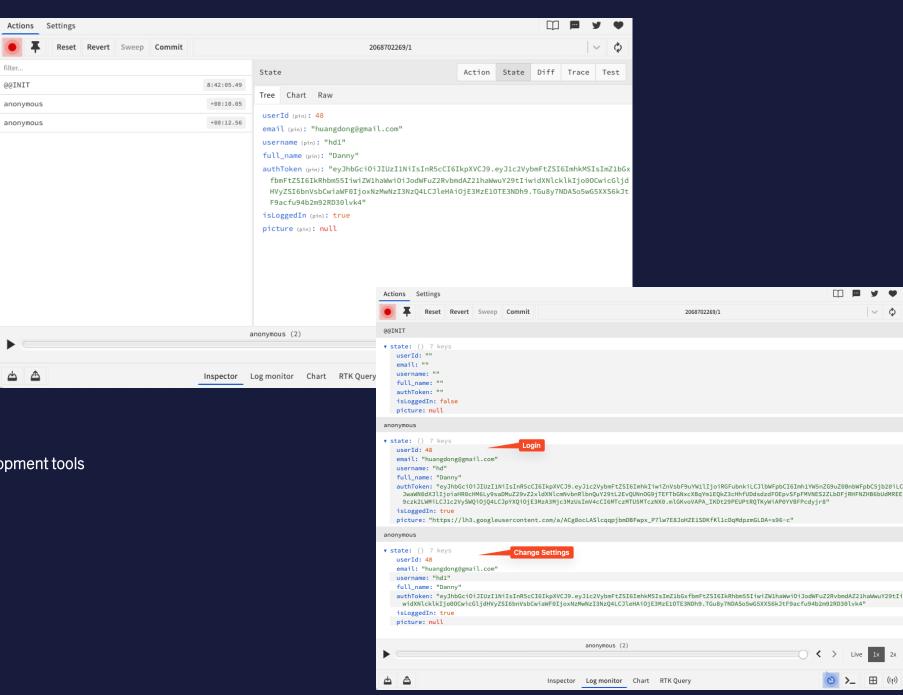
persist(

devtools(

**Technologies:** 

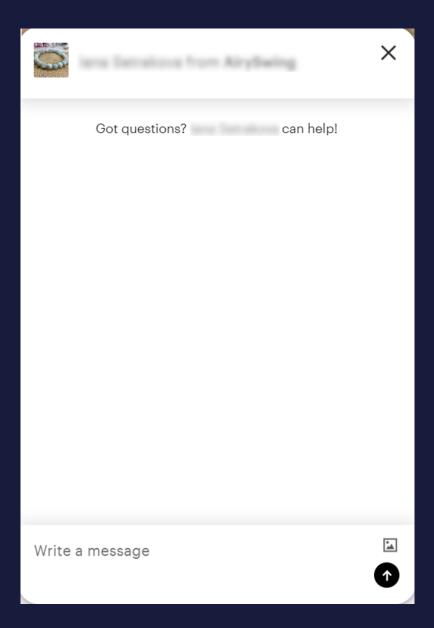
#### zustand for State Management

- Compatible with Redux development tools
- View State in real time
- State Change History
- Playback of State changes



#### FUTURE WORK

- Enabling a virtual assistant
- Item subscription
- Sharing items in social media
- More complete search functionality
- Browse by category
- More tests for front-end and back-end



#### SUMMARY

#### Fully functional Etsy clone with

- creating stores and managing products
- engaging between sellers and buyers
- enjoying a seamless shopping experience

