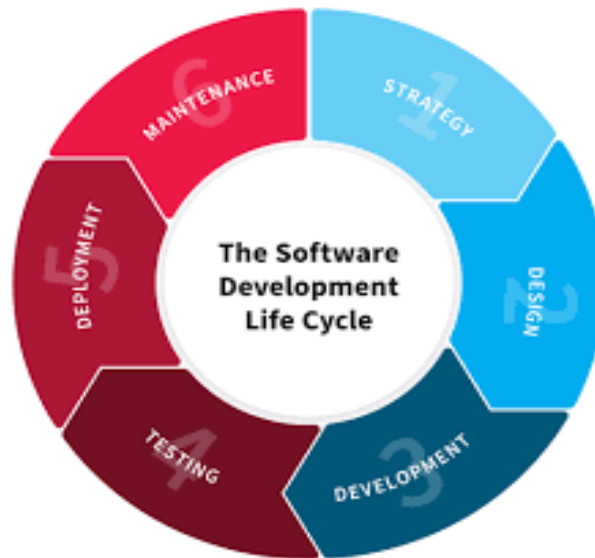




SRS for FactEcho – News System



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Overview

FactEcho is a news application that provides users with up-to-date news across various fields, emphasizing truth, transparency. Initially, FactEcho will be available as a website, with a mobile app and community engagement planned for future versions.

Features and Experience

Authentication and Authorization

- User Registration: Users can register using their email and a unique username, followed by email verification.
- Login: Users can log in with their email and password.
- Password Reset: Users can reset their password through a secure method.
- Security: Passwords will be encrypted, and JWT will be implemented for secure authentication.
- OAuth: User can register and login by OAuth like Google, X, Facebook.

User Profile and Settings

- Profile Management: Users can update their profile information, including username, password and profile picture.
- Account Deletion: Options for users to delete their accounts if desired.
- Multi Roles: Roles for admins, authors and users.
- Author Public Profile: Users can see author articles and its profile.

News Categories

- Categorized News: A dedicated section for various news categories (e.g., politics, sports, technology).

News Articles

- Various Articles: Light size articles contains images and embedded media frames.
- Article Search: Users can search for news articles and access individual article pages.
- Article Page: Page for each article.
- Article Quires: Suggested random article, trend articles, latest articles.
- Interactions with Article: In the future, Users maybe can like, save and comment on articles, we can allow users to follow

specific authors, Also we can allow users to add their articles too.

Admin Dashboard

- Users Permissions Controls: Set users as authors and set authors Permissions.
- Categories Controls: Admin can create, update and delete various categories.
- Articles Controls: Admin can create, update and delete various Articles.
- Ads Controls: In the future, Admin can create ads for a specific places in the app like some ads in slider in home and categories pages another ads slider in articles and search pages.
- Email News Letter: In the future, we can allow admin to send news letter to users who subscribe in this service.
- Statistics View: In the future, we can add statistics for admin about the system.

Author Dashboard

- Author Articles: Author can create, update and delete its articles depending on his permissions.

Premium Features

- Subscription Options: In the future, Future plans to offer premium subscriptions for an ad-free experience and exclusive content.

Installation

- In the future, Instructions on how to set up and run the application.

Usage

- In the future, Guidelines on how to use the app effectively.

Contributing

- In the future, Information on how to contribute to the project.

License

- In the future, Details about the project license.

SWOT Analysis



- People want easy-to-access, diverse news in many fields.
- There's plenty of free news from daily events, saving us money on content creation.
- We have skilled authors to provide high-quality, interesting news.
- Digital marketing can help us reach and engage more people.



- As a startup, we have limited resources, which might slow our growth.
- We don't have a strong brand name yet, which might reduce user trust.
- We face tough competition from established news platforms.
- Financial limits may restrict hiring top writers or tech talent.



- We have a good team of writers and marketers to help us grow and produce great content.
- More people are reading news on digital devices.
- Social media is a low-cost way to market and share our news.
- We could partner with other media outlets or influencers to boost our credibility.
- We can expand into multimedia, like videos or podcasts, to attract more users.



- Strict regulations and laws in Egypt may limit what we can do.
- Potential taxes could impact our finances.
- High competition and limited resources increase the risk of failure.
- People may prefer social media news over web platforms.
- Economic instability could impact ad revenues and sponsorships, which we'll need for growth.

Business Model

The Business Model Canvas



The Business Model Canvas

Key Partners



Key Partners

Who are our Key Partners?

- **Journalists and Reporters:** Provide timely, accurate news and insights from various fields.
- **Content Authors and Freelance Writers:** Contribute in-depth articles, opinion pieces, and specialized content.
- **Public Community Contributors:** Engage in content creation through comments, community reporting, and interactive features.
- **Advertisers and Sponsors:** Support revenue generation through ad placements, sponsored content, and partnership promotions.

Who are our Key Suppliers?

- **Advertising Networks and Platforms:** Supply ad inventory and manage ad distribution.
- **News Agencies and Syndicates:** Provide syndicated news feeds for broader content coverage.

Which Key Resources are we acquiring from partners?

- **Content Resources:** News articles, opinion pieces, and live reports.
- **Community Engagement:** User-generated content and interactive participation.
- **Funding and Revenue Support:** Advertiser partnerships and sponsorships to fund operations and growth.
- **Brand Credibility:** Established journalists and quality advertisers enhance FactEcho's reputation and trustworthiness.

Key Activities



Value Propositions:

- Create, curate, and fact-check news content to ensure quality.
- Personalize content to enhance user engagement.
- Manage ads and sponsored content for revenue generation.

Distribution Channels:

- Deliver news via app, website, and social media.
- Use newsletters and notifications to engage users.

Customer Relationships:

- Provide user support and gather feedback.
- Build community through interactive features.
- Offer premium, personalized experiences.

Revenue Streams:

- Earn through ads, subscriptions, and sponsored content.

Key Resources



Key Resources

- **Value Propositions:** Content from journalists, free news sources, and community engagement.
- **Distribution Channels:** Mobile app, website, social media.
- **Customer Relationships:** Digital marketing, customer support.
- **Revenue Streams:** Advertising, subscriptions.

Resource Types:

- **Physical:** Servers.
- **Intellectual:** Brand (FactEcho), user data.
- **Human:** Journalists, Authors, marketers, tech support.
- **Financial:** Ad revenue, startup funds.

Value Propositions



Value Propositions

- **News Quality and Reliability:** High-quality, timely, and accurate news across diverse fields.
- **Personalized Experience:** Tailored news feeds and alerts to match user interests.
- **Community Engagement:** Interactive features for user discussions and feedback.
- **Flexible Access:** Available on mobile and web for on-the-go news consumption.
- **Premium Options:** Ad-free subscription for an enhanced, exclusive experience.

Customer Relationships



Customer Relationships

- **Self-Service:** Users can browse and consume content independently on the app and website, supporting a seamless, user-driven experience.
- **Automated Services:** Personalized news recommendations and notifications tailored to individual preferences.
- **Community Interaction:** User comments, likes, and discussions foster a sense of community.
- **Co-Creation:** Users contribute feedback, ideas, and can report on local events, enhancing content relevance.

Channels



Customer Channels

- **Digital Presence:** App, website, and social media platforms, where users primarily engage and access news content.
- **Email & Notifications:** Newsletters, alerts, and updates delivered directly to users for continuous engagement.

Channel Phases

1. **Awareness:** Social media marketing, SEO, and targeted ads to increase brand visibility.
2. **Evaluation:** Free access to curated articles and sample content showcases our quality.
3. **Purchase:** In-app subscription options for users to upgrade to premium, ad-free experiences.
4. **Delivery:** Real-time content updates on app and website for seamless access.
5. **After-Sales Support:** FAQ, in-app support, and email assistance to resolve user issues.

Channel Efficiency

- **Cost-Effective Channels:** Social media and newsletters for low-cost, broad reach.
- **Integrated User Experience:** Personalized notifications and content ensure regular user engagement.

Customer Relationships



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- **Self-Service:** Users can browse and consume content independently on the app and website, supporting a seamless, user-driven experience.
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Customer Segments



Target Customers

- **Mass Market:** General public seeking reliable news across various topics, including politics, entertainment, health, and technology.
- **Niche Market:** Specific demographics interested in specialized content, such as local news or specific industries.

Most Important Customers

- **Daily News Consumers:** Individuals who rely on quick access to timely news updates.
- **Community Engagers:** Users interested in local events and community discussions.
- **Subscribers:** Readers who prefer premium, ad-free content and enhanced features.

Channels



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Channel Efficiency

- **Cost-Effective Channels:** Social media and newsletters for low-cost, broad reach.
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Cost Structure

Key Costs:

- **Server Costs:** Expenses related to hosting, maintenance, and data storage for the app and website.
- **Labor Costs:** Salaries for the central journalist and freelance authors, ensuring quality content creation.
- **Marketing Expenses:** Budget for social media promotions, ads, and outreach efforts.

Cost-Related Insights:

- **Key Resources:** Server hosting is one of the most significant costs.
- **Key Activities:** Content creation and community interactions drive substantial expenses.
- **Cost-Driven Approach:** The business model focuses on cost-efficiency by hiring freelance authors and utilizing automated systems where possible.

Cost Characteristics:

- **Fixed Costs:** Salaries for the central journalist, hosting fees.
- **Variable Costs:** Freelance author payments, marketing costs can fluctuate based on strategy.
- **Economies of Scale:** As the user base grows, server costs per user may increase.

Revenue Streams

Revenue Streams

- **Advertising Revenue:** Income from ads displayed in the app and on the website.
- **Premium Subscriptions:** Users pay for an ad-free experience and exclusive content.
- **Donations and Sponsorships:** Funding from users and organizations supporting the platform.

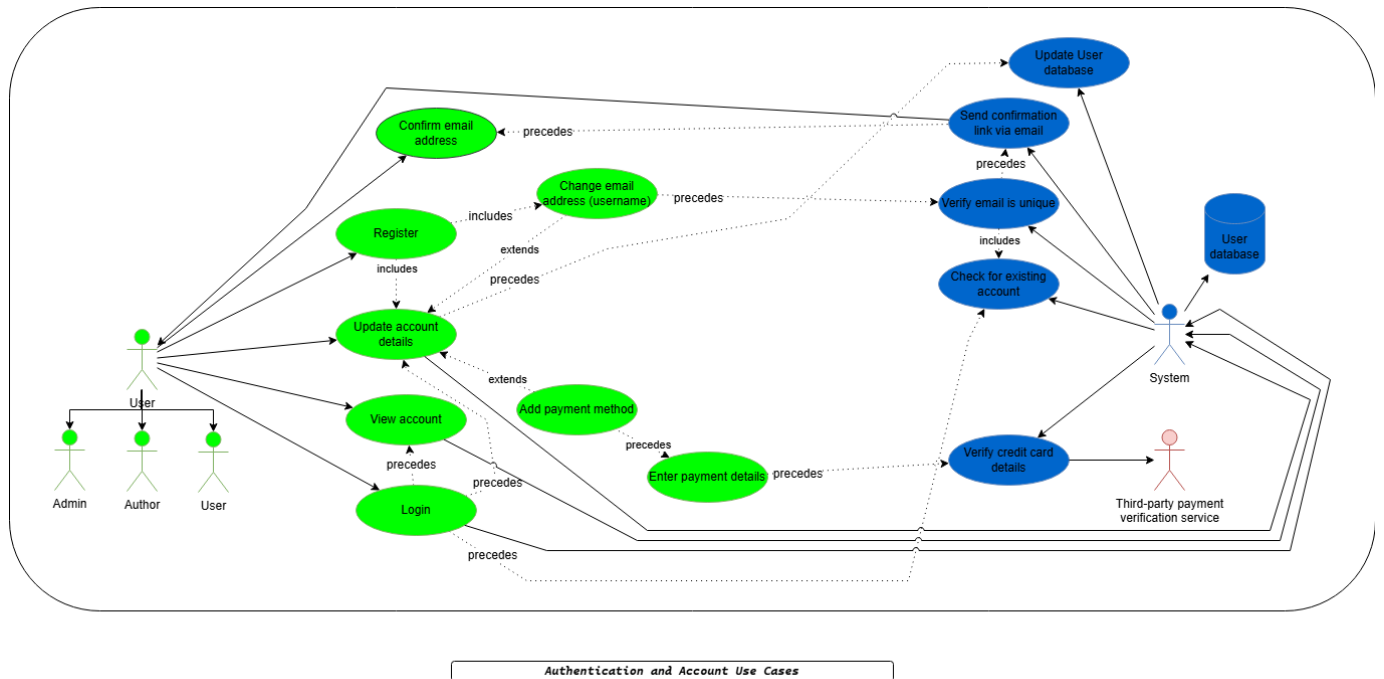
Customer Payment Insights:

- Customers value high-quality, reliable news and are willing to pay for enhanced experiences.
- Current payment methods include subscriptions via credit/debit cards and ad revenue from advertisers.
- Preferred methods may include mobile wallets and in-app purchases.

Revenue Contribution:

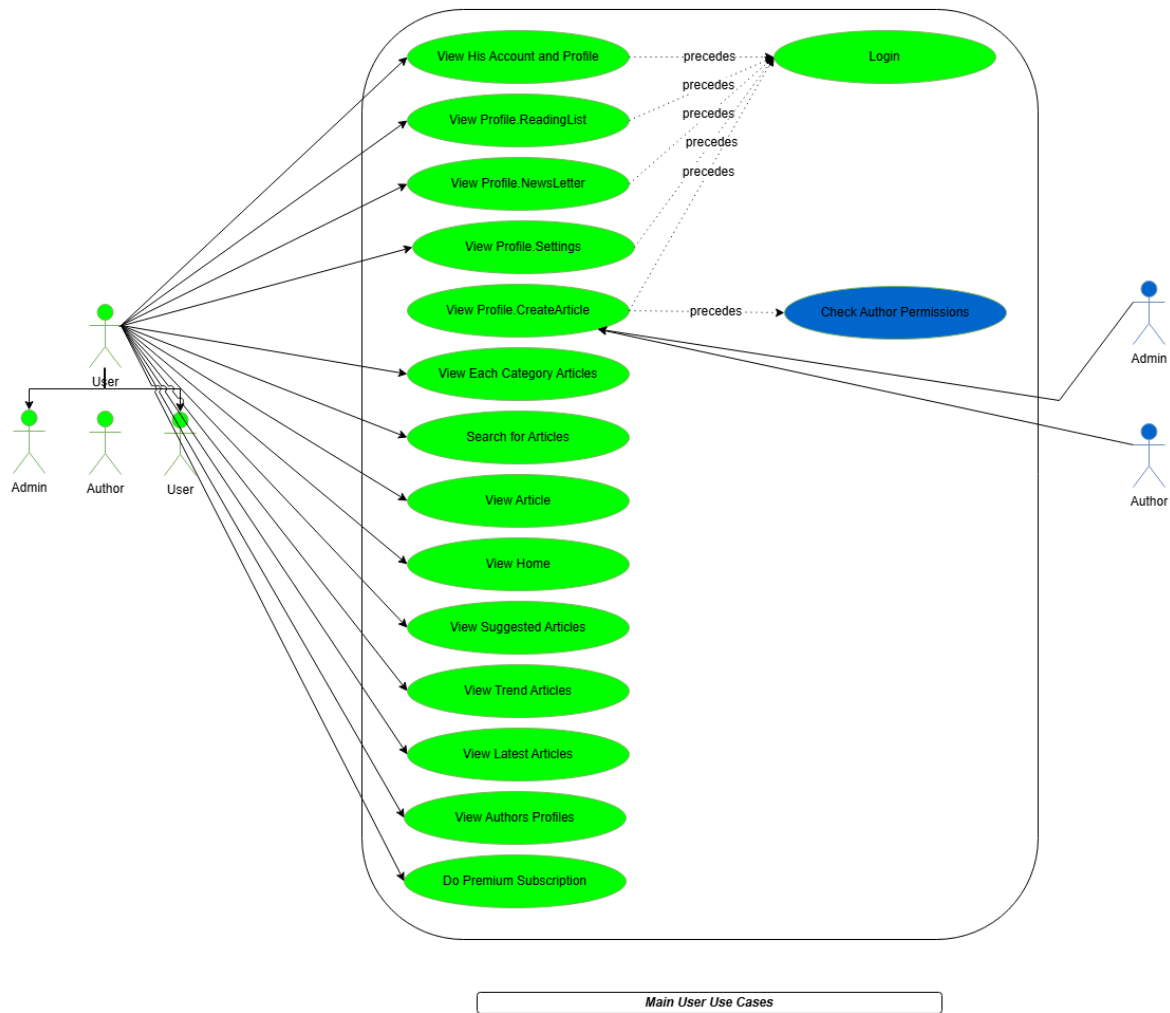
- **Advertising:** ~60%
- **Premium Subscriptions:** ~30%
- **Donations/Sponsorships:** ~10%

Use Case Diagram



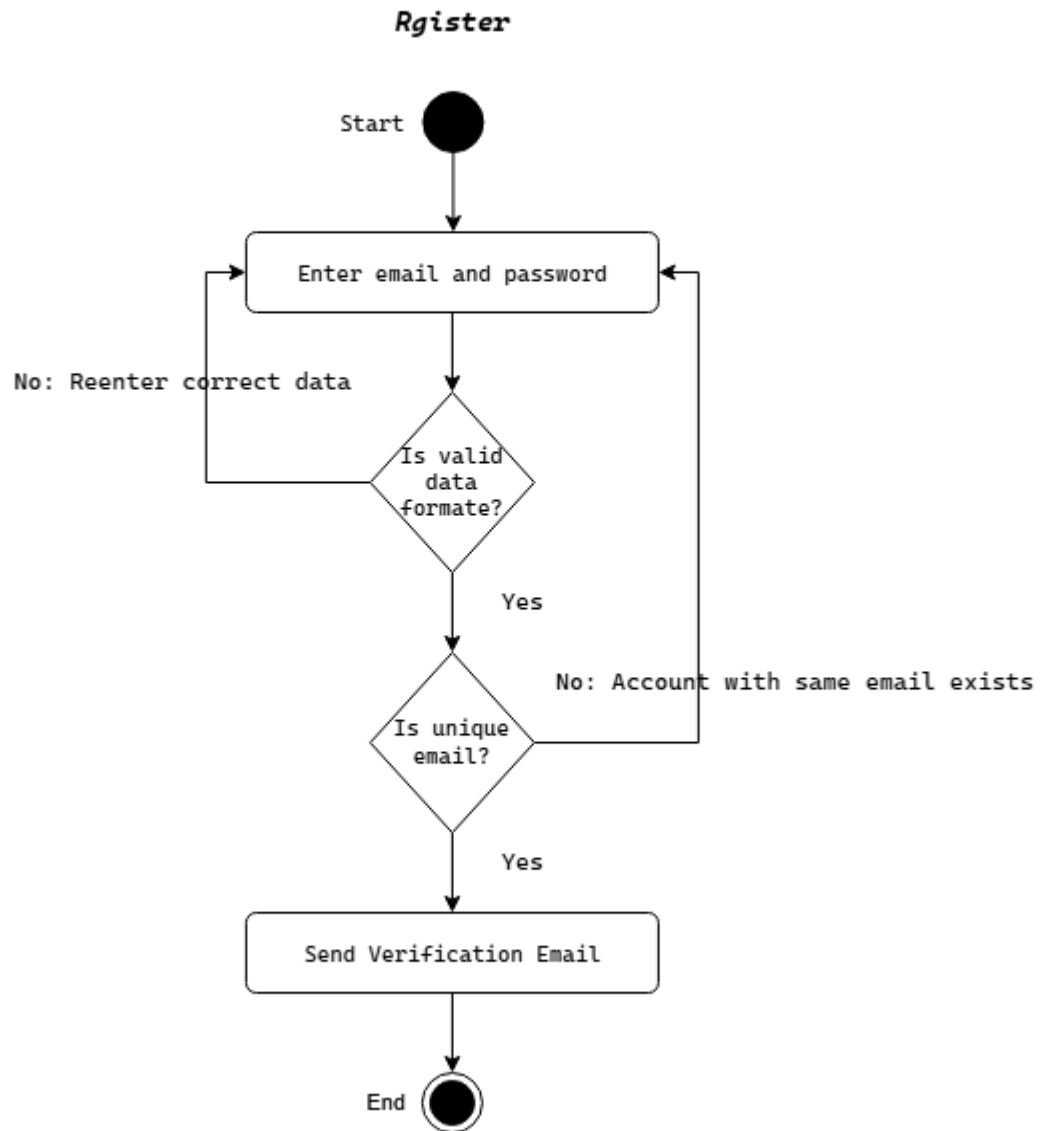


Admin Use Cases

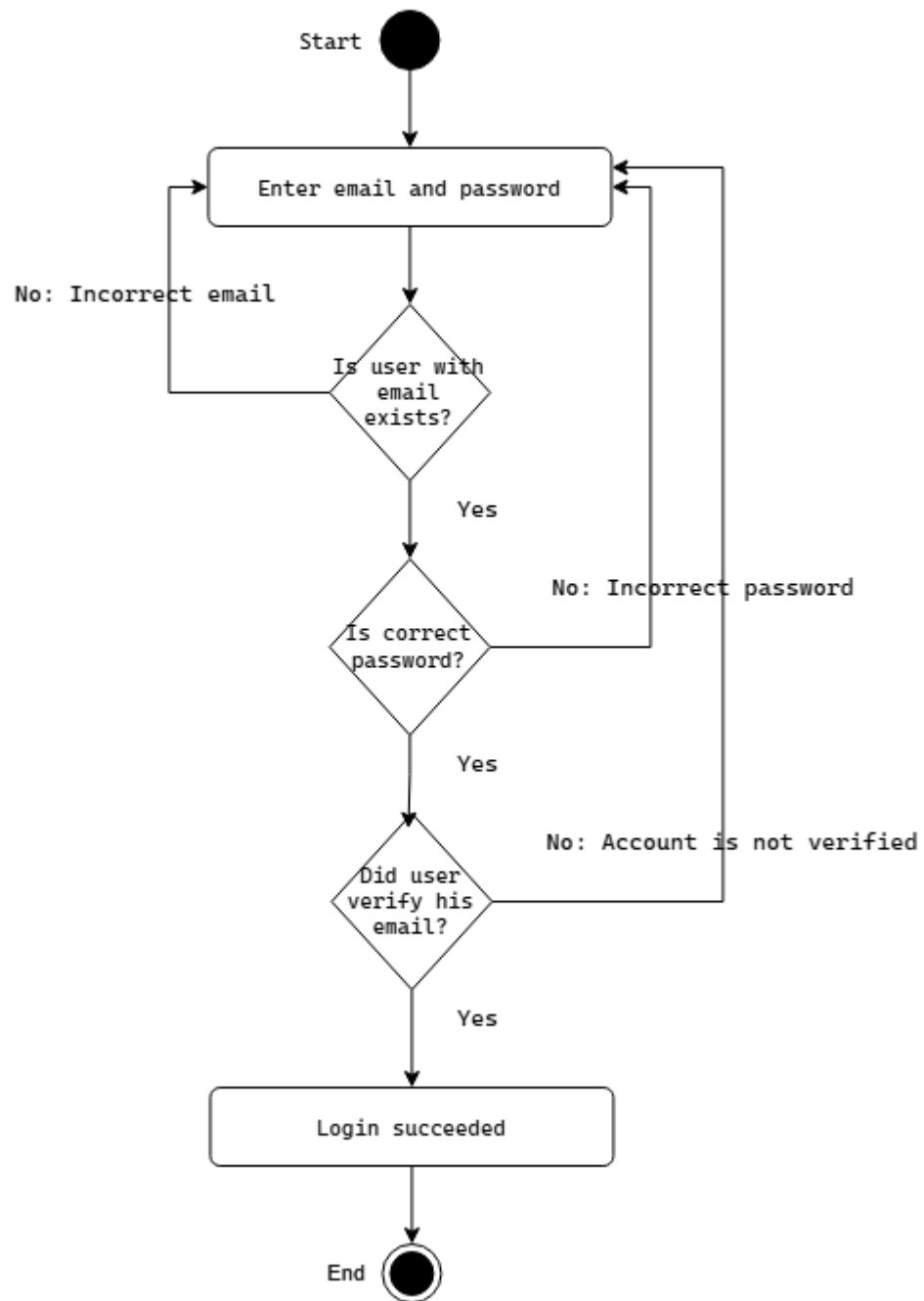


Activity Diagram

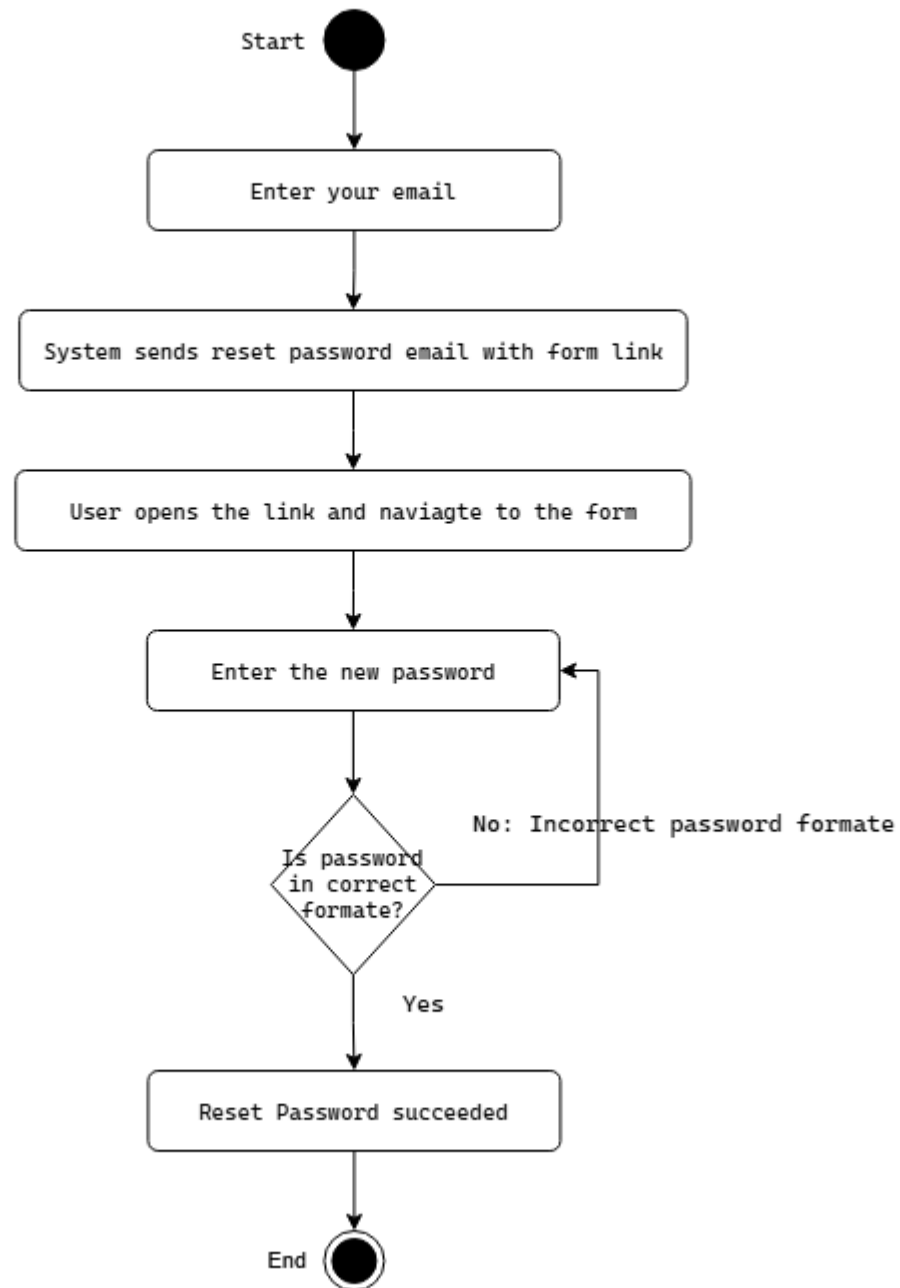
Activity Diagrams for FactEcho



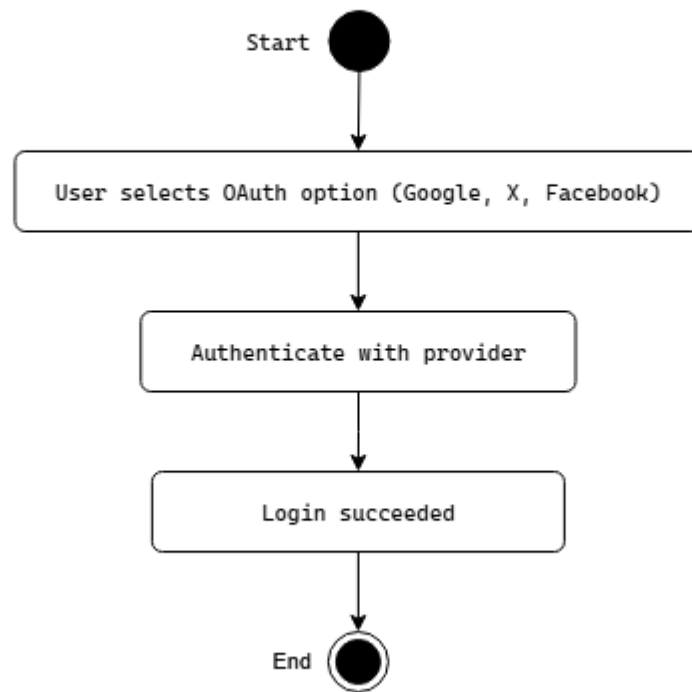
Login



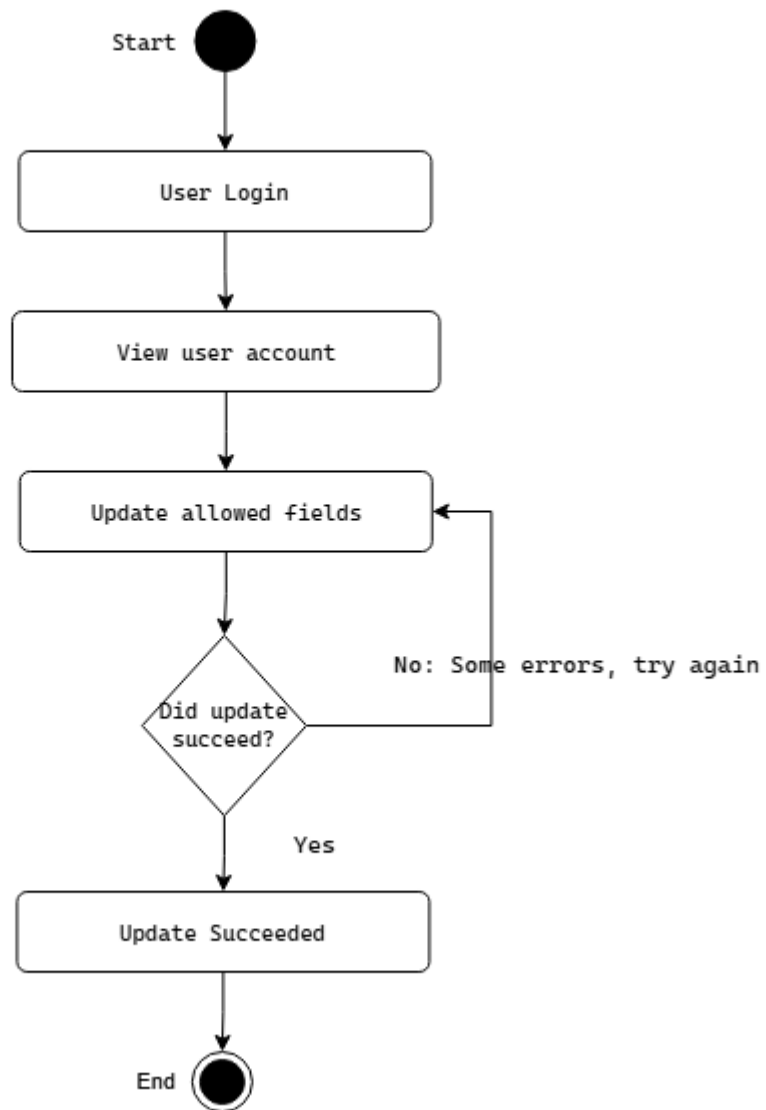
Reset Password



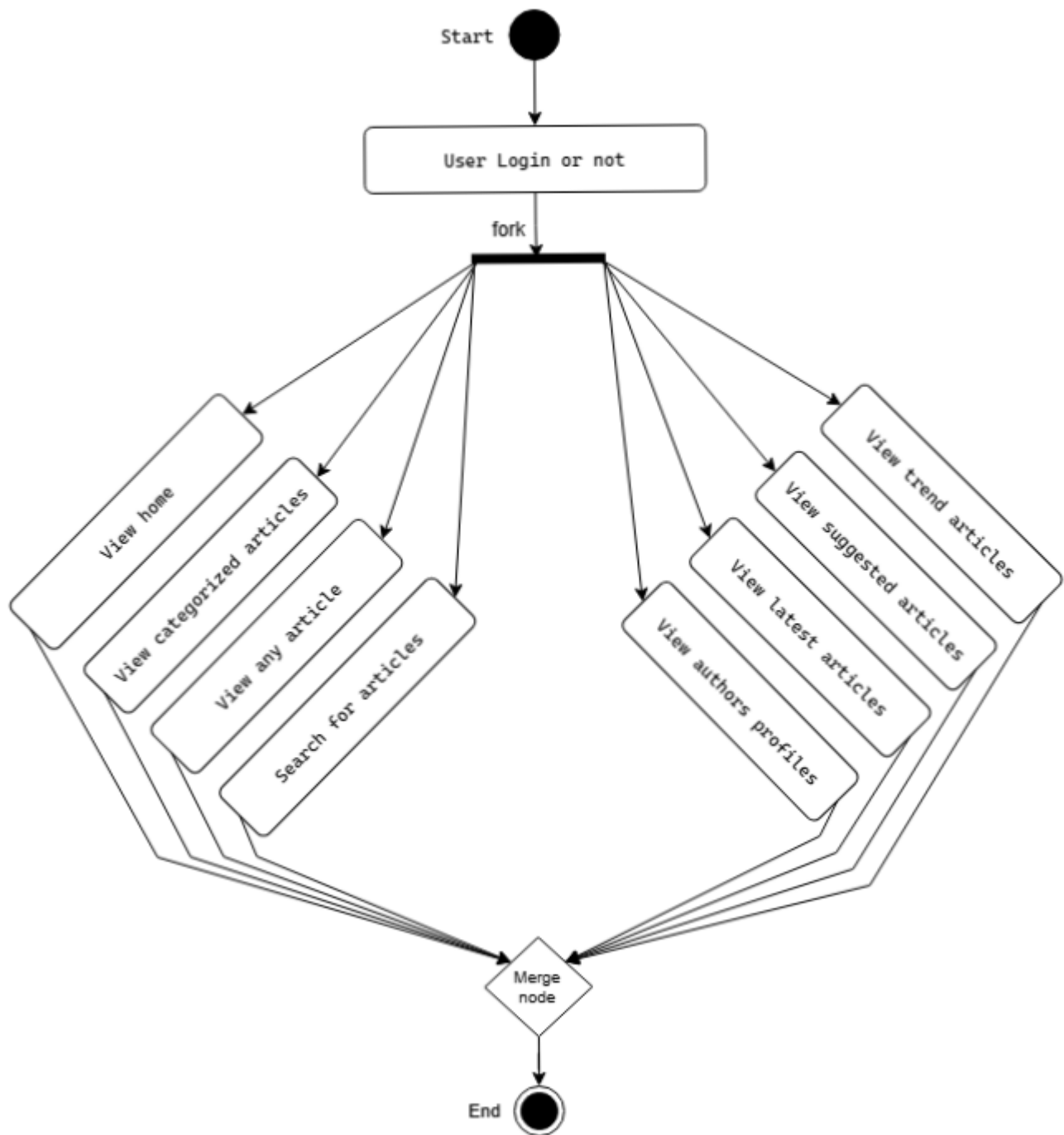
OAuth Login



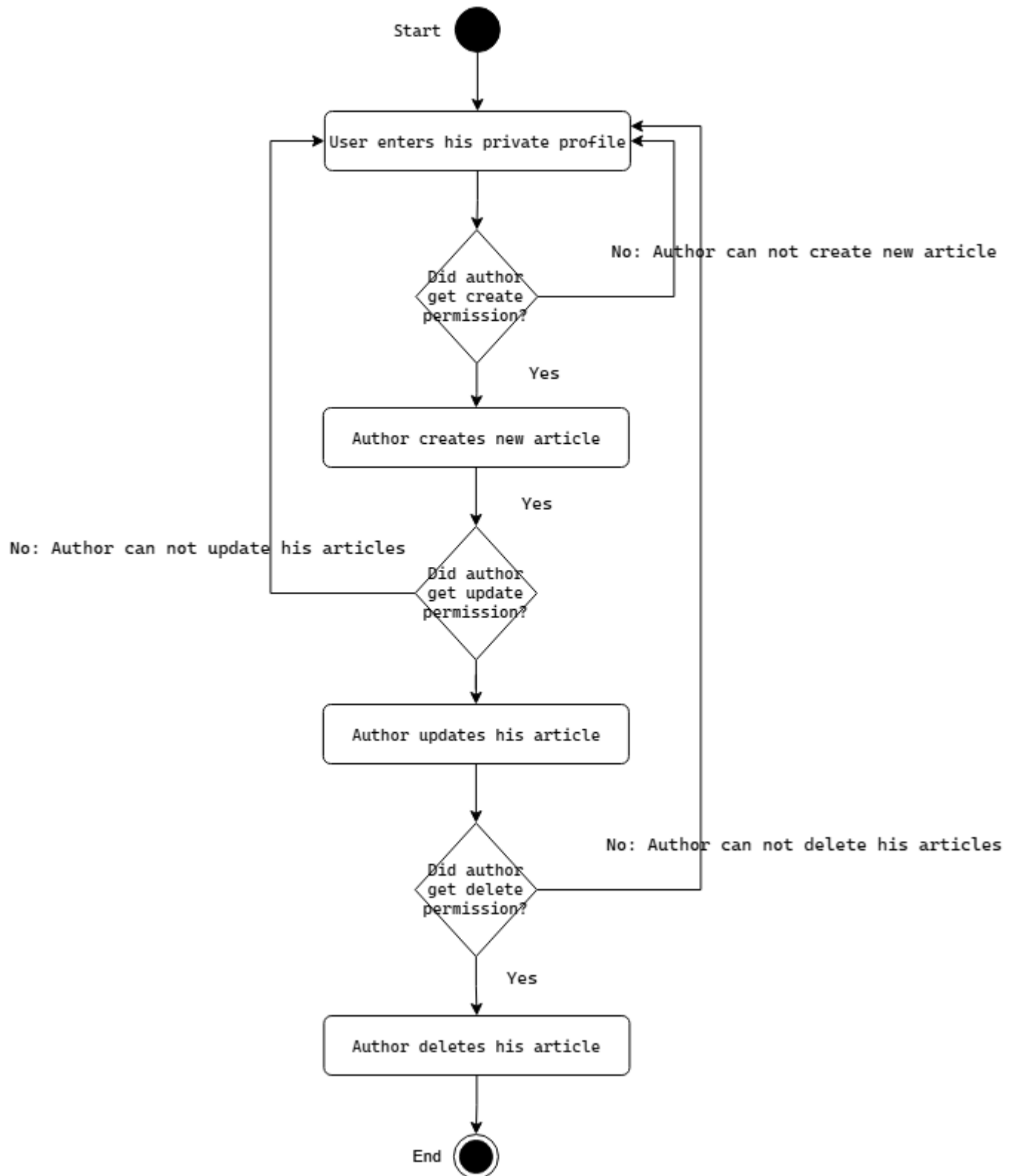
Update Profile



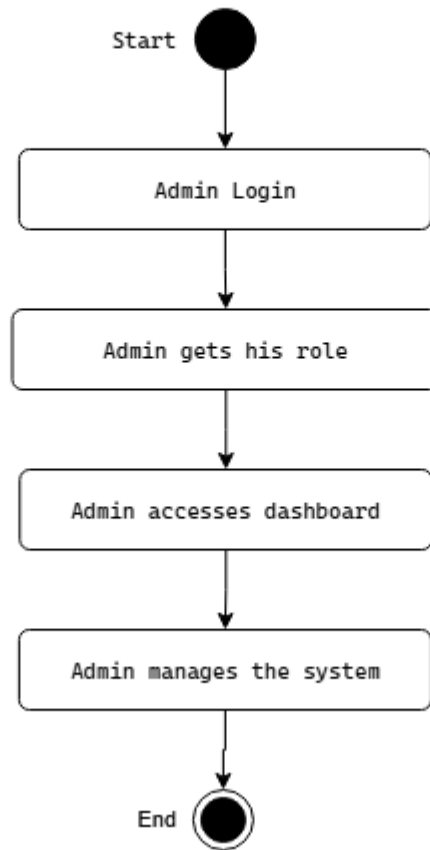
Access Content



Author Articles Management

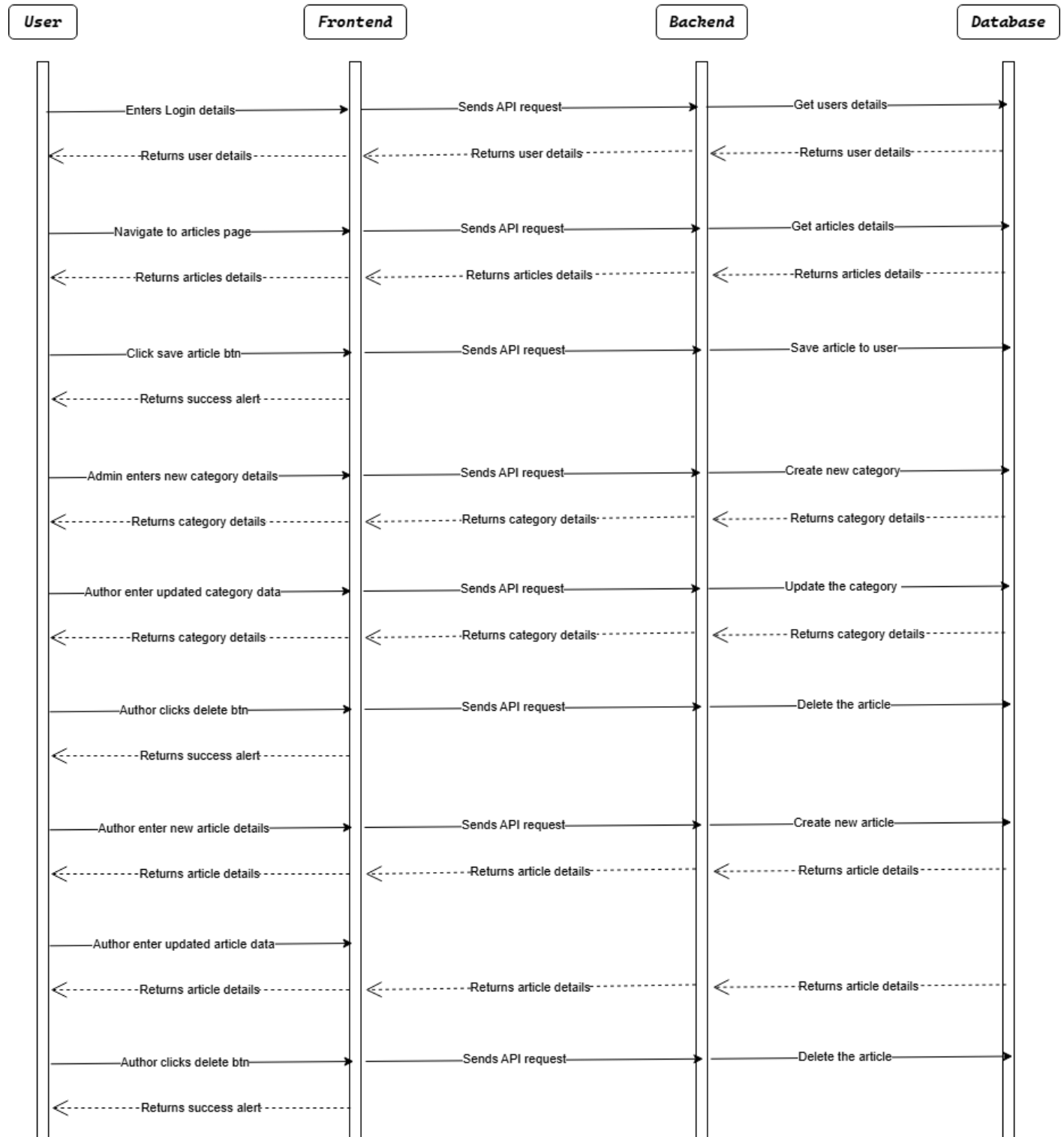


Admin Dashboard



Sequence Diagram

Sequence Diagram for FactEcho - News Application



Technologies Used

- Analysis and design: draw.io, docs
- Frontend: HTML, CSS, TypeScript, React.js, Tailwind CSS
- Backend: Node.js, TypeScript, Express.js
- Testing: Jest
- Database: PostgreSQL
- Media Storage: Cloudinary
- Authentication: JWT (JSON Web Tokens)

Clients

we'll start with a single web client..

The web client will be implemented in React.js.

The App will take design like <https://www.bbc.com/arabic>.

See design snapshots here [./UI.Snapshots.md](#).

API server will serve a static bundle of the React app.

Uses Tailwind CSS UI for building the CSS components.

Hosting

The code will be hosted on Github.

The web server and client will be hosted on vercel platform as a test prototype.

The server should be hosted at paid VIM.

The client should have a domain name and SSL/TLS.

The server will have closed CORS policy except for the domain name and the web host server.