

# **InfluenceConnect**

A Project Report Submitted to Cotton University in Partial Fulfillment of the

Requirements for the Degree of

**Master of Computer Application (MCA)**

In the Department of Computer Science and Information Technology By

Name of the Student: Shankhanad Choudhury,

Enrolment No.: MCA2265040, 4th Semester



Under the Guidance of Mr. Ramyakinkor Koch,

Chief Technical Officer

Fineworks Technologies and Media Solutions LLP, Guwahati

DEPARTMENT OF COMPUTER SCIENCE AND IT

COTTON UNIVERSITY, GUWAHATI

ASSAM-781001, INDIA

JUNE 2024



**DEPARTMENT OF COMPUTER SCIENCE AND IT  
COTTON UNIVERSITY, GUWAHATI-781001**

**Website: <http://cottonuniversity.ac.in>**

**Phone No.: 0361-2608074**

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Date : .....

## **CERTIFICATE**

This is to certify that the project entitled “InfluenceConnect” submitted by Shankhanad Choudhury for the award of the degree of Master of Computer Application (MCA) in the Department of Computer Science and Information Technology is the outcome of a bona fide project work under my/our supervision. This work has not been submitted previously for any other degree of this or any other University. It is further certified that the candidate has complied with all the formalities as per the requirements of Cotton University, Guwahati-01. I/We recommend that the project report may be accepted in partial fulfillment of the requirements for the degree of MCA of this University.

**Mr. Melur Phangcho,**  
Supervisor,  
Dept. of Computer Science and IT,  
Cotton University, Guwahati-01,  
Assam, India

**Dr. Hiten Choudhury,**  
HOD,  
Dept. of Computer Science and IT,  
Cotton University, Guwahati-01  
Assam, India



अप्रमत्तेन वेदव्यम्

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COTTON UNIVERSITY, GUWAHATI-781001**

**Website: <http://cottonuniversity.ac.in>**

**Phone No.: 0361-2608074**

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Date : .....

## **CERTIFICATE**

The Project Report entitled “InfluenceConnect” submitted by Shankhanad Choudhury (MCA2265040) in partial fulfillment of requirements for the degree of Master of Computer Application (MCA) of Cotton University has been examined.

**Signature of Internal Examiner**

**Date:**

**Place:**

**Signature of External Examiner**

**Date:**

**Place:**

# DECLARATION

I, Shankhanad Choudhury, bearing MCA Enrolment No.: MCA22065040 hereby declare that the subject matter of the project entitled “InfluenceConnect” is the record of work done by me under the guidance of Mr. Melur Phangcho, Department of Computer Science and Information Technology, Cotton University, Guwahati-01, Assam.

I further declare that the contents of this project report did not form the basis for the award of any degree to me or to anybody else to the best of my knowledge. The report has not been submitted to any other University or Institution. This report is being submitted to Cotton University, Guwahati-01 for the degree of MCA in the Department of Computer Science and Information Technology.

**Date:**

**Shankhanad Choudhury**  
**MCA 4th Semester**

**Place:**

Enrolment No.: MCA2265040  
Dept. of Computer Science and IT  
Cotton University, Guwahati-01

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I am also grateful to my parents for all their motivation and help to reach a greater position in my life. I am also very much thankful to my friends and batchmates for their motivation, suggestions and support

Shanakhanad Choudhury  
MCA2265040

# Annexure I

## LIST OF ABBREVIATIONS

SL No.	Abbreviations	Full Form
1	OS	Operating System
2	DB	Database
3	UI	User Interface
4	UX	User Experience
5	HTML	HyperText Transfer Protocol
6	CSS	Cascading Style Sheets
7	JS	JavaScript
8	DFD	Data Flow Diagram
9	ER	Entity Relation
10	CPU	Central Processing Unit
11	RAM	Random Access Memory

# Annexure II

## LIST OF FIGURES

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# 1. Introductions

## 1.1. About the Project

InfluenceConnect acts as a bridge between the world of social media influencers and the strategic needs of businesses. It streamlines the often-complex process of influencer marketing by creating a centralized platform for collaboration. Businesses can leverage InfluenceConnect to identify influencers whose target audience aligns perfectly with their brand. Influencers, on the other hand, gain valuable exposure and partnership opportunities with credible brands. This mutually beneficial ecosystem fosters innovative marketing campaigns that resonate with target audiences and propel both businesses and influencers forward in the ever-evolving digital landscape.

## 1.2. Objectives

- To create a minimal viable product to
- Influencers can showcase their niche, reach, and previous collaborations for targeted brand discovery
- Businesses easily post marketing needs, budget, and target audience for a streamlined process.
- Secure communication channels and clear expectations between influencers and brands.
- Features like reviews and secure transactions build trust and credibility within the platform for both sides.

## 2. Review of Literature

### 2.1. Existing System

The current influencer marketing landscape is often characterized by a reliance on manual influencer discovery through social media scouting, email marketing and physical agencies. This method is not only labor-intensive and subjective, but its effectiveness hinges on finding the perfect match and negotiating mutually beneficial terms. While existing platforms can facilitate the search process, they may prioritize readily available metrics that don't necessarily translate to campaign success. These limitations can result in suboptimal collaborations that fail to connect with the target audience and deliver the desired impact.

### 2.2. Disadvantages of the Existing System

1. **Inefficiency:** Finding the right influencer can be a tedious process, involving manual research and outreach.
2. **Lack of Transparency:** Metrics used to measure campaign success can be vague or subjective, making it difficult to gauge true return on investment (ROI).
3. **Fraudulent Practices:** Fake followers and engagement can inflate an influencer's perceived reach, leading to wasted marketing spend.
4. **Limited Data Analysis:** Basic tools may not provide in-depth insights into audience demographics or campaign performance, hindering future optimization efforts.

## 2.3. Proposed System

InfluenceConnect tackles these challenges by establishing a centralized platform that streamlines influencer discovery and collaboration. By leveraging data-driven matching and fostering transparency through user profiles and project details, InfluenceConnect facilitates efficient connections between brands and influencers with demonstrably relevant audiences. Businesses can target campaigns with greater precision, while influencers gain access to a wider range of opportunities that align with their expertise and niche. The platform fosters trust through secure communication channels and facilitates secure transactions, ensuring a smooth and mutually beneficial experience for all parties involved.

## 2.4. Advantages of the Proposed System

1. **Improved Efficiency:** Matching algorithms based on audience demographics and campaign goals connect brands with suitable influencers, saving time and effort.
2. **Enhanced Transparency:** Detailed influencer profiles and clear project descriptions ensure clear expectations and informed decision-making.
3. **Reduced Risk of Fraud:** A focus on genuine engagement metrics and secure communication helps to minimize the risk of fraudulent influencer practices.
4. **Data-Driven Insights:** Integration with analytics tools provides valuable data on campaign performance and audience demographics, allowing for continuous optimization and improved campaign ROI.

## 3. Technologies

By ensuring that we have the necessary software and hardware requirements in place, we can set up a productive development environment for building our website.

### 3.1. Softwares Used:

#### 3.1.1. **React JS**

A robust JavaScript library, React empowers developers to construct user interfaces with reusable components. These components act as building blocks, enabling the creation of complex and interactive web applications efficiently. React's focus on component-based architecture promotes scalable and maintainable codebases.

#### 3.1.2. **Tailwind CSS**

Tailwind CSS provides a utility-first approach to styling web interfaces. This eliminates the need for writing extensive custom CSS code. Instead, developers leverage pre-built utility classes that offer granular control over various style aspects like color, spacing, and typography.

#### 3.1.3. **Git**

Git is a distributed version control system that tracks changes made to code over time, enabling developers to revert to previous versions, collaborate seamlessly with team members, and securely manage code repositories. Git fosters a collaborative development environment and ensures a clear history of project evolution.

#### 3.1.4. **MongoDB**

A document-oriented NoSQL database, MongoDB offers a flexible data storage solution. This is particularly advantageous when dealing with diverse data structures, unlike traditional relational databases that require predefined schemas. In InfluenceConnect's context, MongoDB's flexibility is ideal for storing information about influencers, businesses, and marketing campaigns, where data structures might vary considerably.

#### **3.1.5. Code Editor**

A code editor is a specialized text editor designed for efficient and productive coding. Beyond basic text editing capabilities, code editors offer features like syntax highlighting, code completion, and debugging tools. These functionalities significantly enhance the development experience by streamlining code writing, comprehension, and troubleshooting. Popular choices include Visual Studio Code.

## **3.2. System Requirements:**

#### **3.2.1. Processor**

A multi-core processor (quad-core or equivalent) for faster compilation and processing of code.

#### **3.2.2. RAM (Memory)**

At least 4GB of RAM to ensure smooth performance during development and testing.

#### **3.2.3. Storage**

Sufficient storage space for storing project files, dependencies, and databases

#### **3.2.4. Operating System**

Operating system that is compatible with Windows, macOS, or Linux operating systems.

#### **3.2.5. Active Internet Connection**

# 4. System Design

## 4.1. Introduction

System design defines a software system's architecture, components, and functionalities.

Three key tools aid clear communication:

Flowcharts: Visually depict the flow of data and control using symbols. Ideal for understanding simple processes.

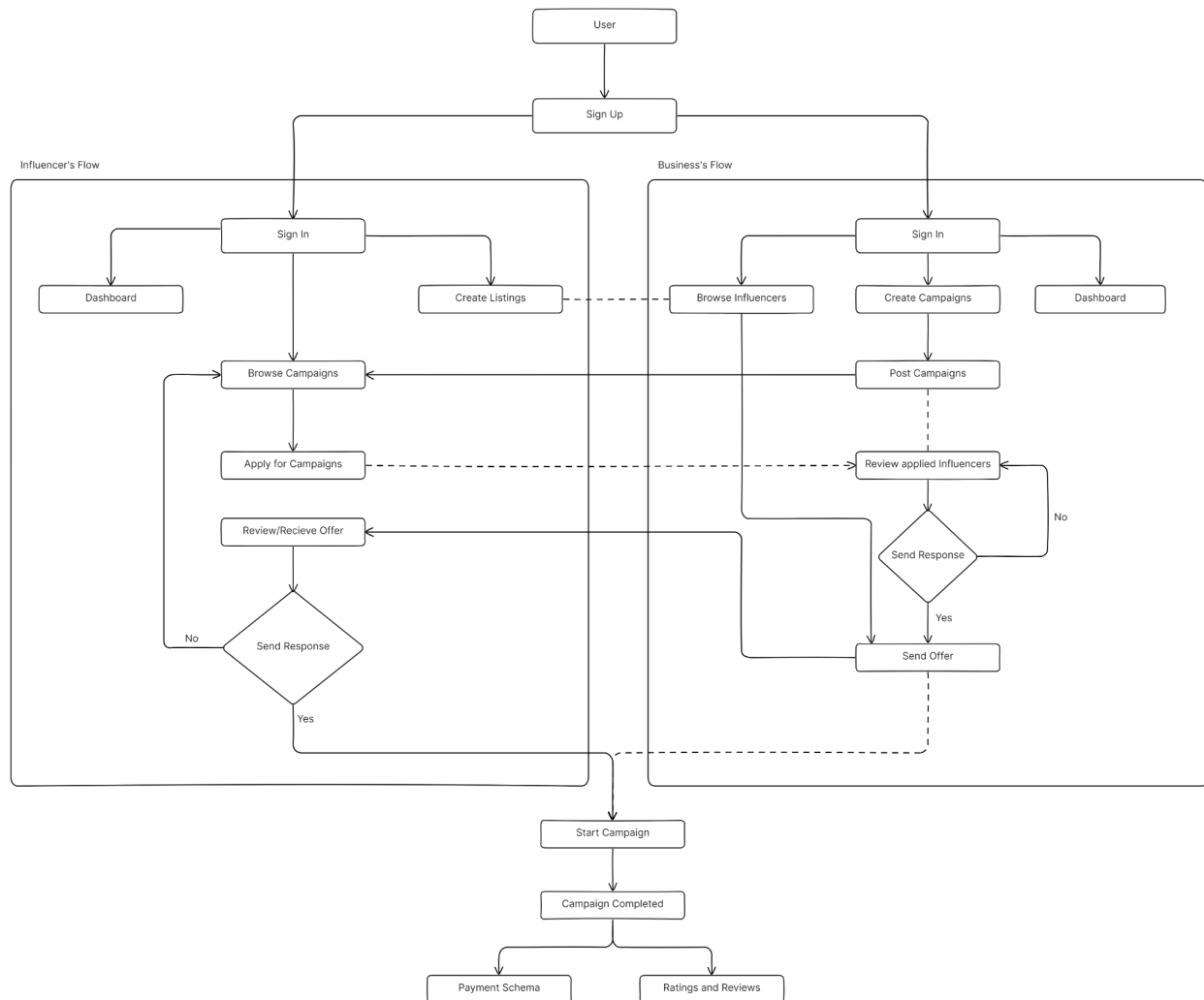
DFDs (Data Flow Diagrams): Offer a high-level overview of data movement through a system. Useful for visualizing complex systems with numerous data flows.

ERDs (Entity-Relationship Diagrams): Map out data objects (entities) and their relationships. Valuable for designing databases and ensuring data integrity.

## 4.2. Flowchart

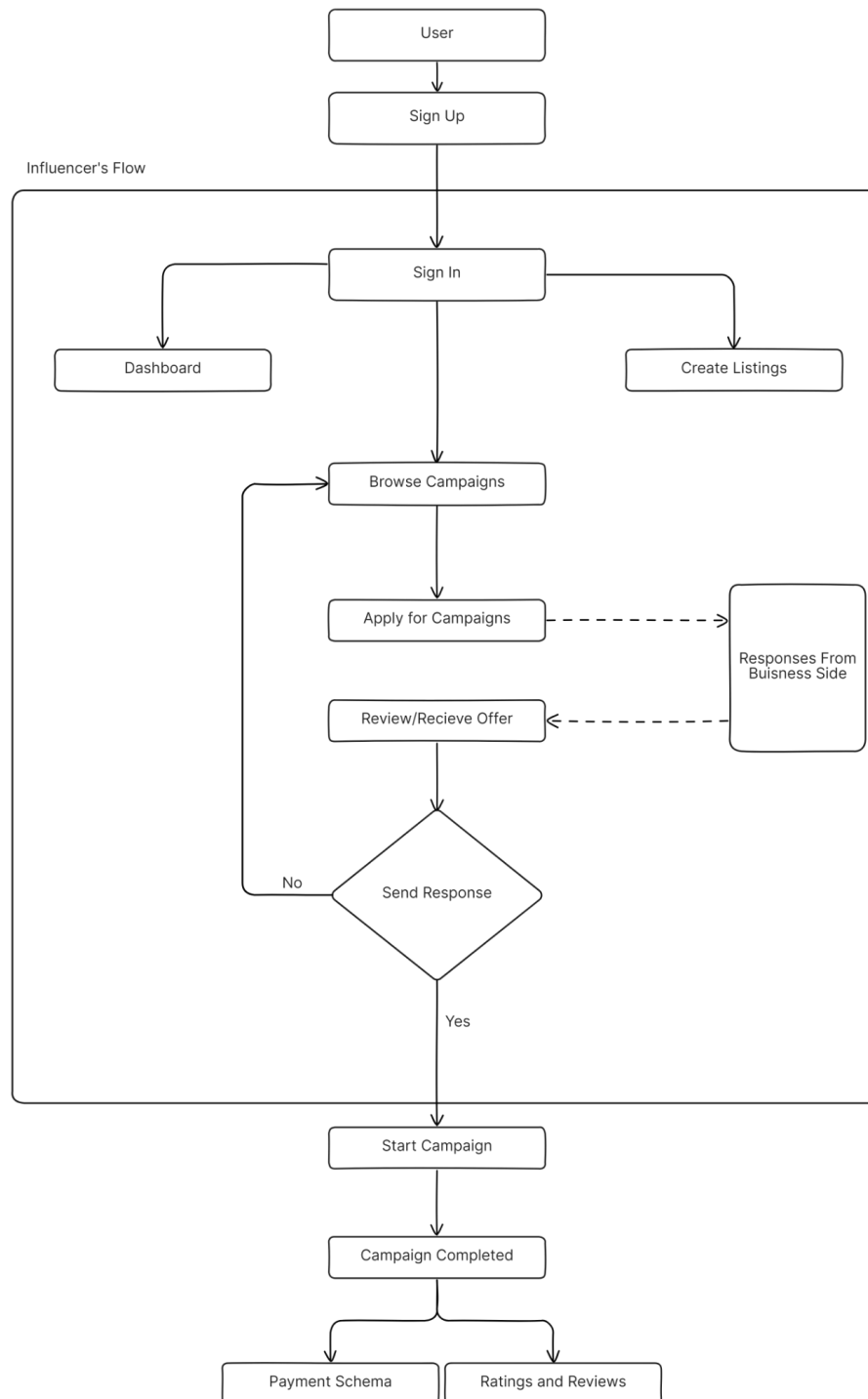
A flowchart is a visual representation of a process, showing the steps and sequence of actions using standardized symbols and arrows. It's used to visualize processes, design systems, document procedures, and analyze and improve workflows.

## Flowchart for InfluencerConnect:

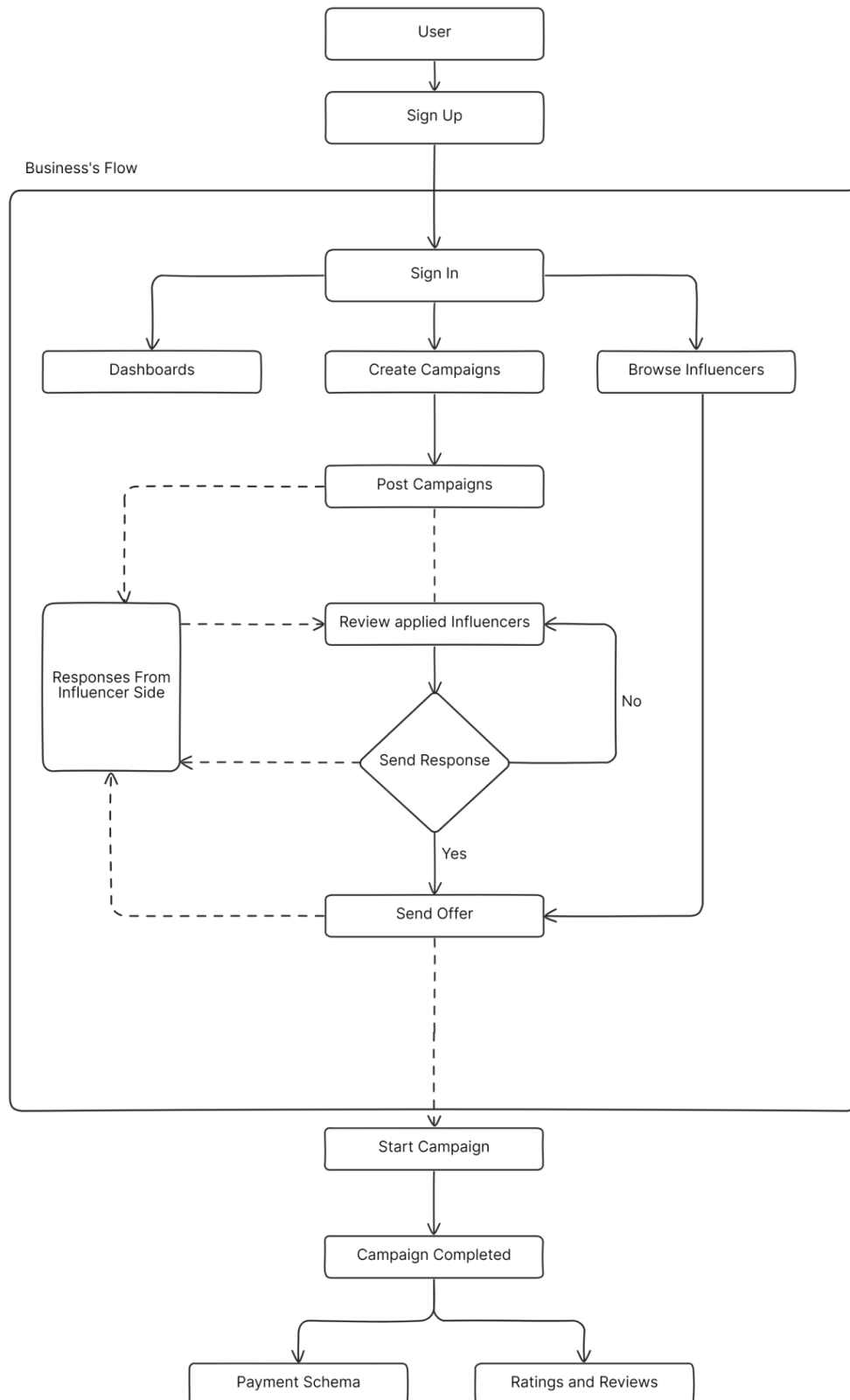




## Flowchart for Influencer:



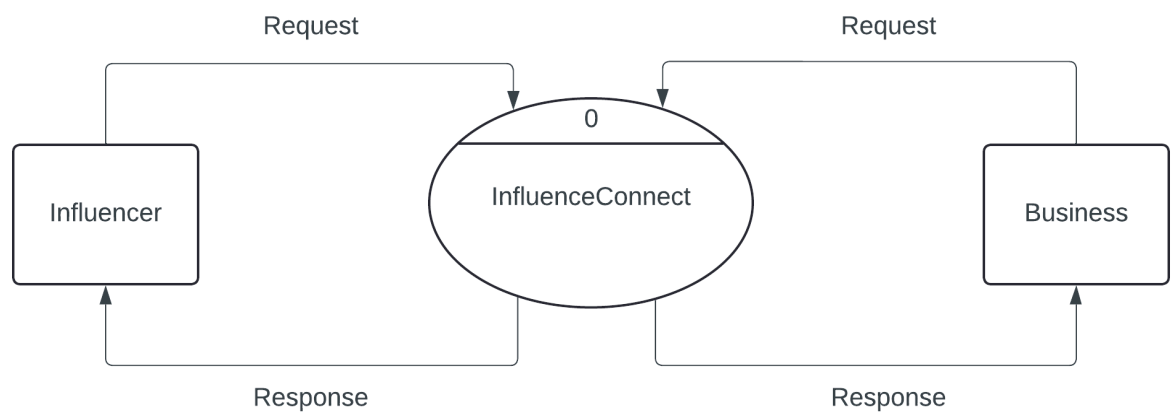
## Flowchart for Business:



## 4.3. DFD

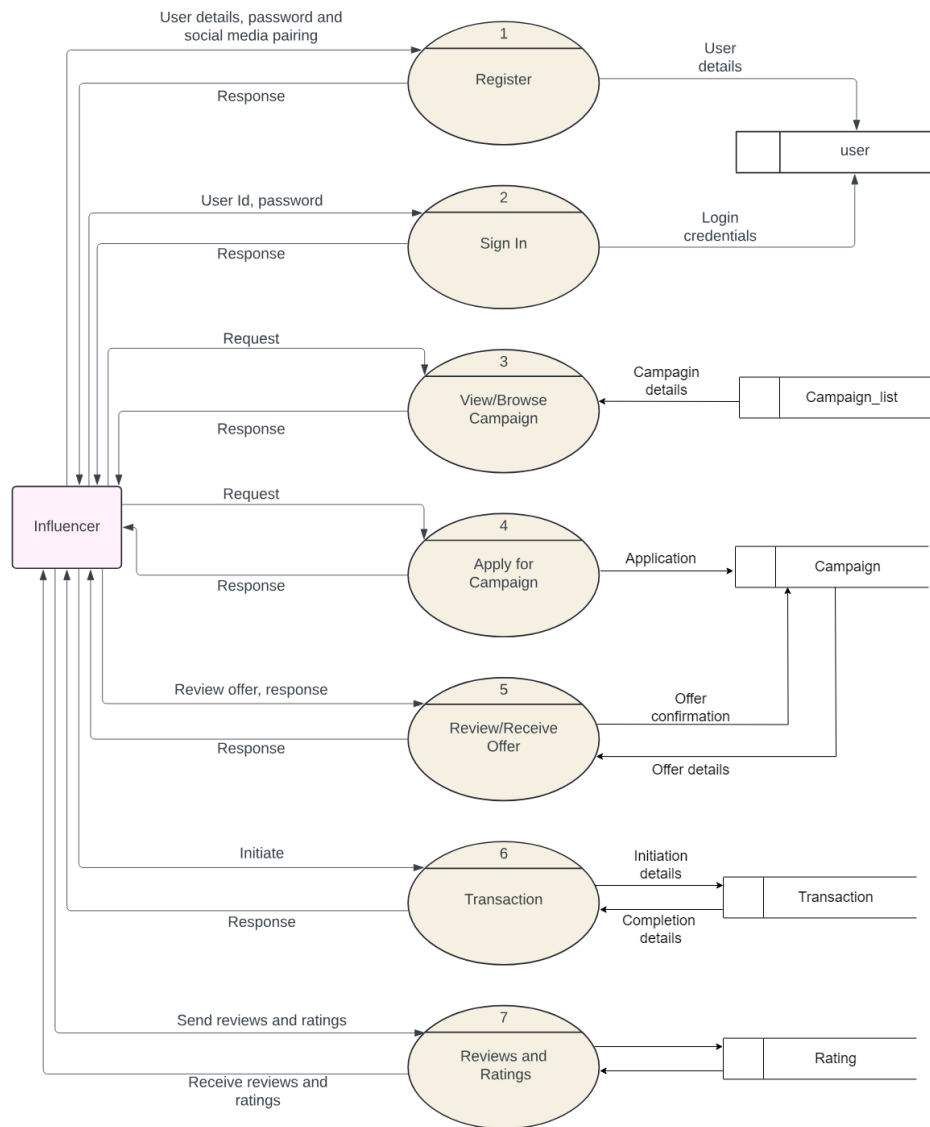
A Data Flow Diagram (DFD) is a visual blueprint that maps how information flows within a system. It shows how data moves between external sources (like customers) and internal processes, highlighting transformations and storage points.

### DFD Level 0

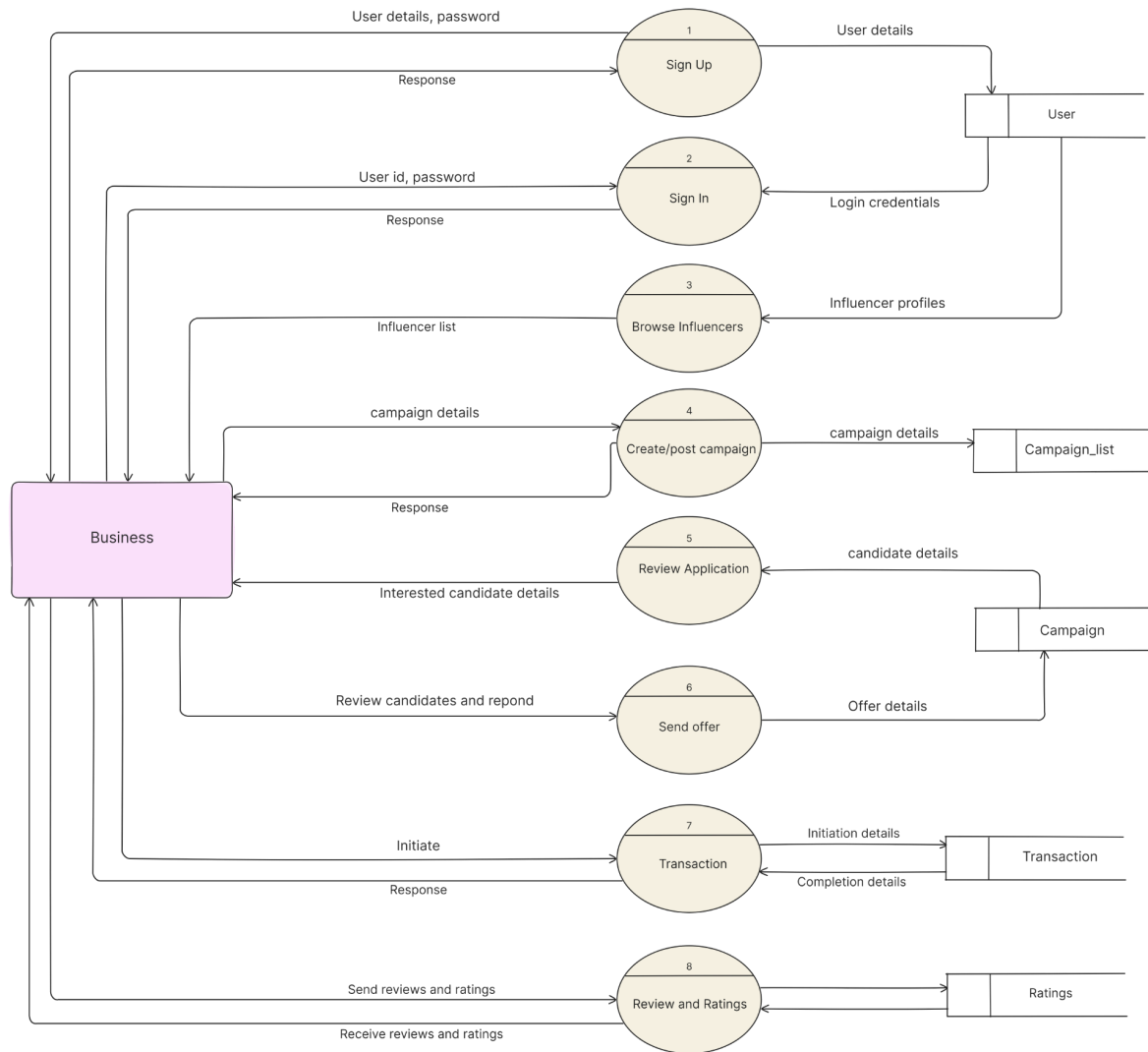


## DFD Level 1

### For Influencer

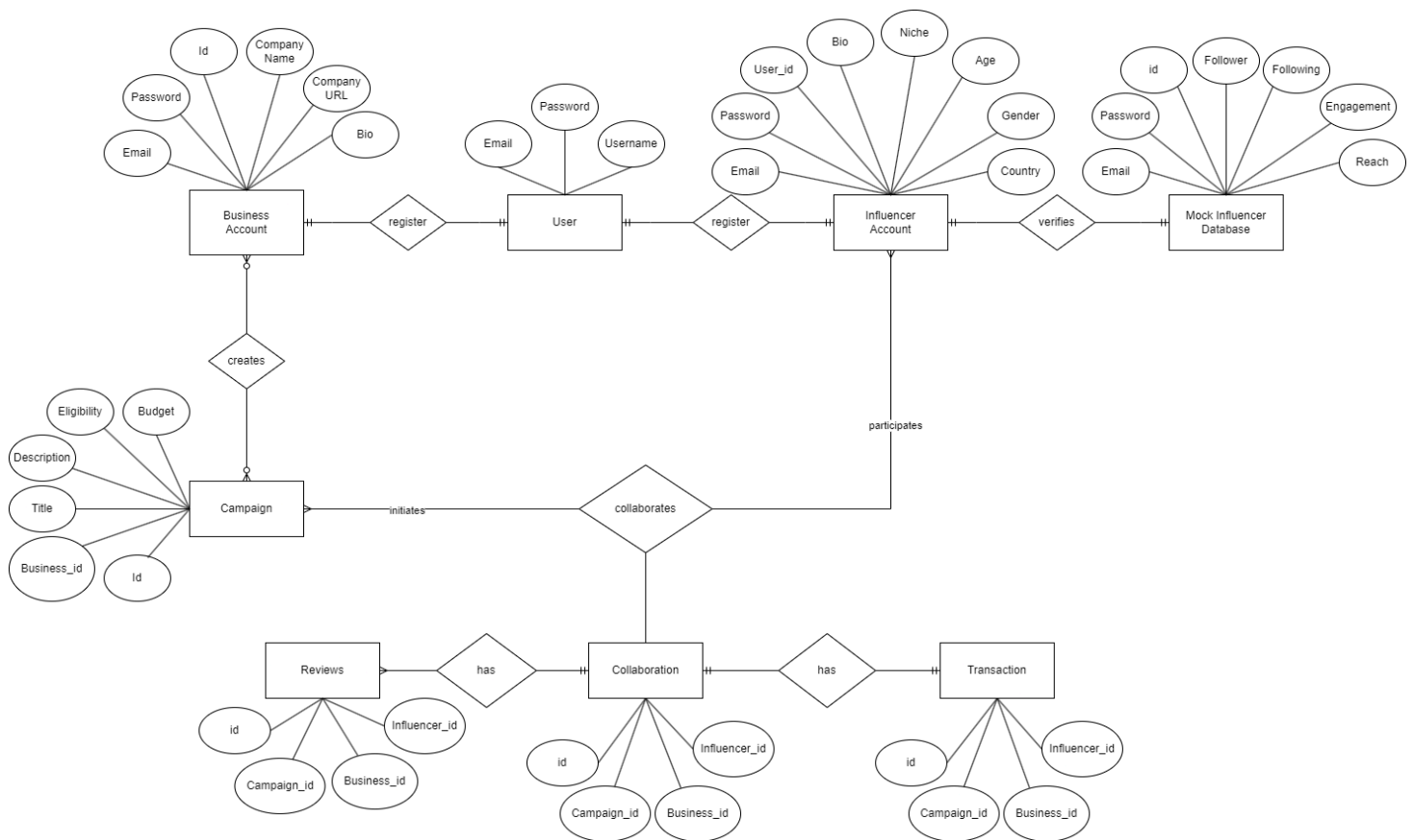


## For Business



## 4.4. ER Diagram

Entity-Relationship Diagrams (ERDs) act as a blueprint for relational databases. They visually represent the entities (data objects) within a system, along with the relationships that exist between them. These relationships are typically one-to-one, one-to-many, or many-to-many, and are denoted by lines connecting the entities. ERDs ensure data consistency and prevent redundancy by clearly defining how data elements relate to each other. They are especially helpful for complex databases with numerous entities and intricate relationships.



# 5. Methodology

This project requires basic knowledge of React, Tailwind CSS, and Instagram API, as well MongoDB for databases. Here's a step-by-step methodology:

## 5.1. Project Initiation & Planning:

The initial phase involves meticulously outlining the application's functionalities. This includes defining user roles (influencers, businesses), user flows (profile creation, project posting, secure communication), and data requirements.

## 5.2. Development Environment Setup:

A robust development environment is paramount for efficient coding. I will install the necessary software including:

Code Editor: A powerful code editor like Visual Studio Code will provide the foundation for writing clean, maintainable code.

Node.js & npm: As a JavaScript-based application, InfluenceConnect will leverage Node.js and its package manager, npm, to manage dependencies and external libraries.

Git: Version control is essential for collaborative development and tracking project history. A Git repository will be established to facilitate seamless collaboration and maintain a clear audit trail.

## 5.3. Frontend Development with React and Tailwind CSS:

Employing React JS, a leading JavaScript library, to construct the user interface (UI) for InfluenceConnect. React's component-based architecture promotes code reusability and maintainability, leading to a well-structured and scalable codebase. Tailwind CSS, a utility-first CSS framework, will be implemented to style the UI components. This approach ensures a consistent and modern visual style across the application while minimizing the need for custom CSS code.

## 5.4. Backend Development with MongoDB:

To handle data persistence, a MongoDB database will be established. This NoSQL database offers flexibility and scalability, perfectly suited to accommodate the diverse data structures required for influencer profiles, project details, and communication history.

Node.js, a JavaScript runtime environment, will likely serve as the foundation for the backend server. Server-side code will be written to interact with the MongoDB database, enabling CRUD (Create, Read, Update, Delete) operations for efficient data management.

- 5.5. Building a secure platform is paramount with secure communication channels. Secure financial transactions related to marketing campaigns, a secure payment gateway integration which will ensure safe and transparent handling of financial exchanges.
- 5.6. **Testing & Deployment:**  
Rigorous testing will be conducted on all functionalities of InfluenceConnect to ensure a seamless user experience. Following successful testing, the application will be deployed to a robust web hosting platform, making it accessible to a global audience of influencers and businesses.
- 5.7. **Future Improvement:**  
I'll constantly gather user feedback to identify areas for improvement. New features and functionalities will be added based on user needs and market trends, keeping InfluenceConnect at the forefront of influencer marketing solutions.



## **6. Results**

6.1. Screenshots

6.2. Progress

# 7. Conclusions

## 7.1. Conclusion

In conclusion, InfluenceConnect presents a compelling solution to the inefficiencies and limitations plaguing the current influencer marketing landscape. By leveraging a centralized platform, data-driven matching algorithms, and secure communication tools, InfluenceConnect streamlines the process for both brands and influencers. Businesses can target campaigns with greater precision and transparency, while influencers gain access to a wider range of relevant opportunities. This fosters mutually beneficial collaborations that deliver a stronger return on investment and a more impactful brand message. Furthermore, the platform's focus on data-driven insights empowers continuous optimization, ensuring campaigns resonate with target audiences and evolve alongside market trends. Overall, InfluenceConnect offers a promising approach to navigating the dynamic realm of influencer marketing, fostering trust, transparency, and success for all stakeholders involved.

## 7.2. Future Scope

InfluenceConnect can solidify its leadership by:

- AI-powered matching: Refine influencer-brand connections with AI and machine learning for targeted campaigns.
- Influencer management suite: Offer tools for campaign briefs, scheduling, and analytics to streamline collaboration.
- Micro-influencer focus: Expand the platform to cater to influential figures with highly engaged niche audiences.
- Content creation within platform: Integrate royalty-free music, stock photos, and basic video editing for on-platform content creation.
- Global expansion: Facilitate international markets with multilingual support, connecting brands with global audiences and influencers.

## **8. List of References**