Assignment Online Social Media companies like Facebook, Instagram

Assignment: Design an Online Social Media Platform

Your task is to design an online social media platform, similar to Facebook or Instagram, for a new startup company. The platform should allow users to create profiles, share content (such as photos, videos, and status updates), connect with friends and family, and engage with other users through comments, likes, and other social interactions. The platform should also incorporate advertising and other revenue-generating features.

To complete this assignment, you should consider the following:

1. Requirements gathering: What features and functionality will be included in the platform? What are the needs of the target audience and how can the platform meet those needs? What are the business requirements and how can the platform generate revenue?
2. System architecture: What type of system architecture will be used to build the platform? Will it be a monolithic system or a distributed system? What technology stack will be used to build the platform?
3. Data management: How will user data be stored and managed? What type of database will be used? How will data be secured and protected?
4. User interface: What will the user interface look like? How will users interact with the platform? What design considerations need to be taken into account?
5. Performance and scalability: How will the platform perform under heavy loads and traffic? What measures will be taken to ensure scalability?
6. Security: How will user data be protected from unauthorized access? What measures will be taken to ensure the platform is secure?
7. Testing and deployment: How will the platform be tested to ensure it meets the requirements? What steps need to be taken to deploy the platform to production?

Your final submission should include a detailed report outlining your design decisions and justifications, along with any relevant diagrams or other visual aids. You should also provide a working prototype or proof-of-concept demonstrating the core features of the platform.