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Vellore Institute of Technology

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School Of Computer Science and Engineering
(SCOPE)

Digital Assignment - I

Software Engineering Lab

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Contents

1 Question	2
1.1 Answer	2
2 Question	2
2.1 Answer	3
3 Question	3
3.1 Frame 1-4	3
3.2 Frame 5-8	4
3.3 Frame 9	5

1 Question

Analysis and Identification of the suitable process models

1.1 Answer

1. Analysis:
 - Goal: Create a platform for users to connect, share content (text, images, short videos), and interact.
 - Target Audience: Young adults (18-30).
 - Core Features (Initial MVP): User registration/login, profile creation, posting text/images, a chronological feed of followed users, following/follower system, basic notifications (new follower, like).
 - Key Challenges: Scalability, content moderation, user engagement, data privacy, competition.
 - Environment: Dynamic market, user expectations evolve rapidly, technology changes quickly. Need for flexibility and rapid feedback incorporation.
2. Identification of Suitable Process Models:
 - Waterfall: Not suitable. Requirements are likely to change based on user feedback and market trends. A rigid, sequential process would be too slow and inflexible.
 - Agile (Scrum/Kanban): Highly suitable.
 1. Iterative Development: Allows building the platform in small increments (sprints in Scrum), releasing functional pieces early and often (MVP first, then add features like video, groups, messaging).
 2. Flexibility: Easily adapts to changing requirements and user feedback.
 3. Collaboration: Emphasizes close collaboration between developers, designers, product owners, and stakeholders.
 4. Feedback Loops: Regular reviews and retrospectives help incorporate feedback quickly.
 - Spiral: Could be considered if initial risk analysis (e.g., major privacy regulations, core scaling technology) is paramount, but Agile generally offers better speed for feature delivery in this domain.

Conclusion: An Agile methodology, likely Scrum, is the most suitable process model for developing a social media platform due to the need for flexibility, rapid iteration, and user feedback incorporation.

2 Question

Work Break-down Structure (Process Based, Product Based, Geographic Based and Role Based) and Estimations

2.1 Answer

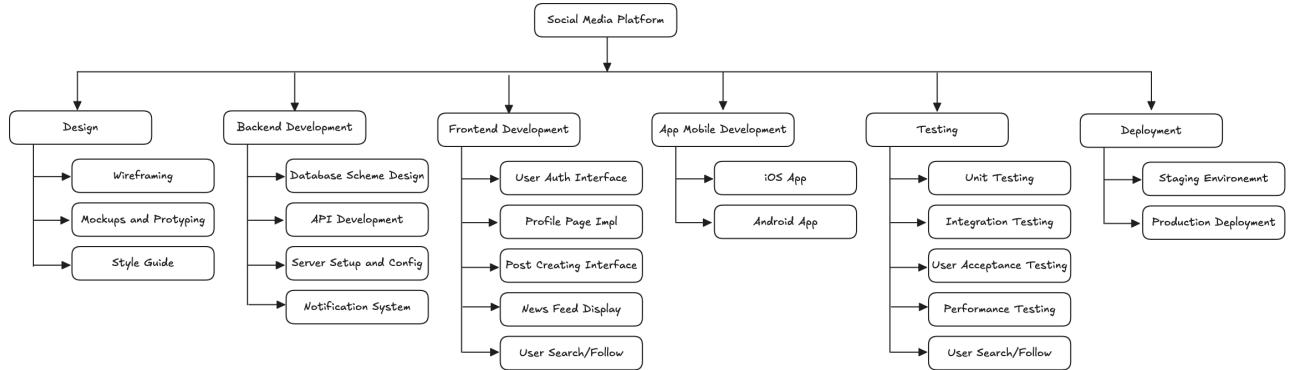


Figure 1: Work Break-down Structure

3 Question

Story Boarding

3.1 Frame 1-4

Frame 1: Main Feed

- Scene: User is logged in and on the main feed.
- UI Elements: Feed with user posts, navigation bar (Home, Profile, etc.), and a prominent “+” or “Create Post” button.
- Action: User notices the button and is about to tap it.

Frame 2: Tapping Create Post

- Scene: Close-up of the user’s finger tapping the “Create Post” button.
- UI Elements: Button animates with feedback (e.g., a ripple or highlight effect).
- Action: Button press triggers a transition to post type selection.

Frame 3: Choose Post Type

- Scene: A modal or full screen shows post type options.
- UI Elements: Buttons labeled “Text Post”, “Image Post”, and “Video Post”.
- Action: User selects “Image Post” by tapping it.

Frame 4: Photo Selection

- Scene: The device’s photo library (or camera interface) is now open.
- UI Elements: Image grid or camera view, “Cancel” and “Select” buttons.
- Action: User taps on a photo from the gallery.

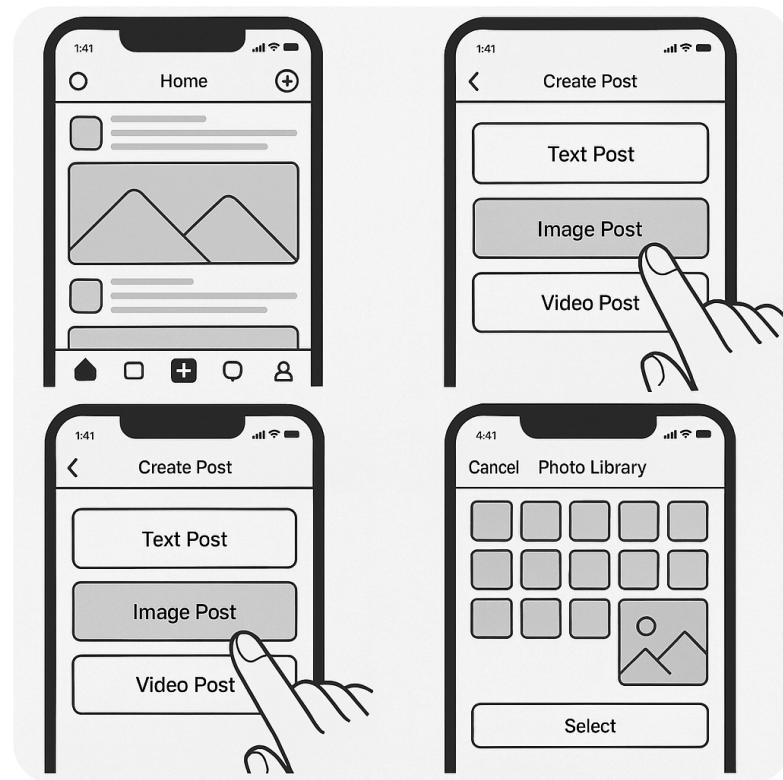


Figure 2: Frames 1-4

3.2 Frame 5-8

Frame 5: Image Preview and Caption UI

- Scene: Image preview screen.
- UI Elements: The selected image is centered. Below it:
 1. A caption input field.
 2. Optional filter selection or image editing tools.
- Action: User begins typing a caption.

Frame 6: Caption Added

- Scene: Caption field filled in.
- UI Elements: Caption reads “Beautiful sunset!”.
- Action: User taps the “Post” button.

Frame 7: Posting the Content

- Scene: Posting action begins.
- UI Elements: A loading spinner or progress bar appears.
- Action: Upload in progress animation.

Frame 8: Post Successful

- Scene: User is back on the feed.
- UI Elements: New post is at the top of the feed, with:
 1. Selected image.
 2. Caption below.
 3. Small “Post successful!” toast message appears briefly.
- Action: User sees their content live.

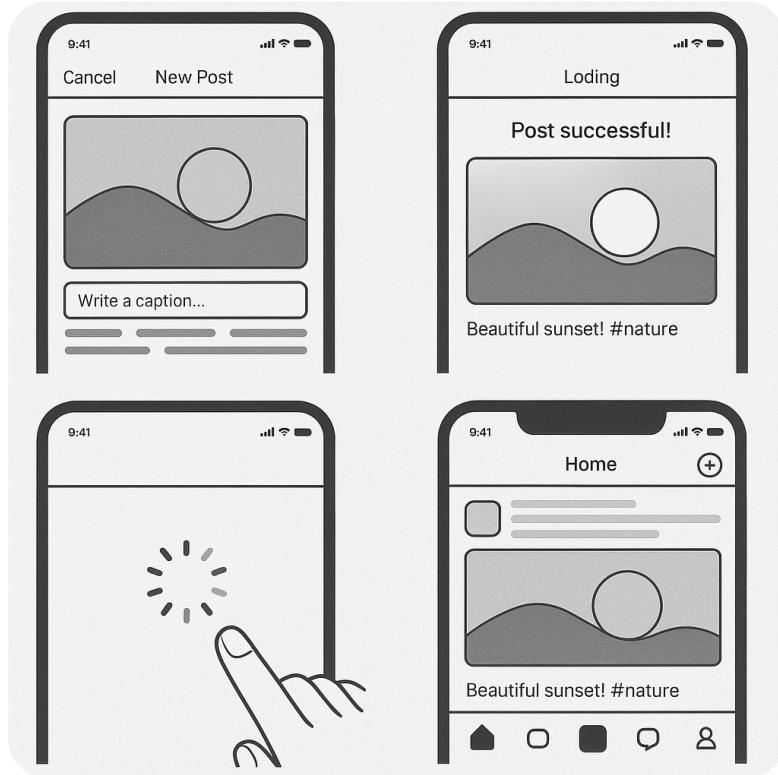


Figure 3: Frames 5-8

3.3 Frame 9

Frame 9: End State

- Scene: User scrolls through the feed with satisfaction.
- UI Elements: Engagement icons (like, comment, share), and smooth animation returning to normal feed flow.
- Action: Flow complete.

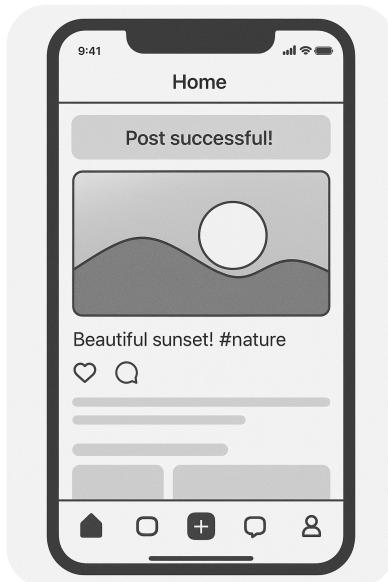


Figure 4: Frame 9