

UI Microlayer

PixoGram

Upload Images

See All Images

See My Images

See My Subscriptions

Account +

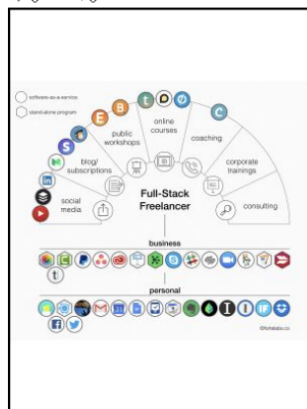
prafful

INTERFACE FOR SOCIAL
PICTURE SHARING

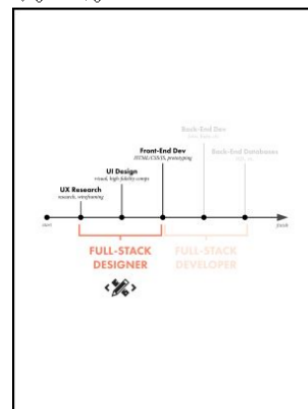
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Prafful Daga

IIHT

Micro Credential: UI Microlayer

Duration: 4 to 8 Hour

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2 BUSINESS-REQUIREMENT:

2.1 PROBLEM STATEMENT:

The PixaGram (Single Page Picture Sharing Application) allows you to:

1. Register as a user
2. Login as a user
3. Retrieve password
4. Manage your user account
5. Login/Logout to/from your account on PixaGram
6. Add Content
 - a. Upload single/multiple pictures, caption and description
 - b. Upload single/multiple videos, caption and description(Shall this be removed?)
7. Manage Content
 - a. View[Organize?] Picture in Gallery
 - b. View[Organize?] Videos in Playlists
 - c. Rename Pictures and Videos
 - d. Edit Caption, Description, Comment
8. Social Features
 - a. Use emojis in comment(remove it)
 - b. Like or Unlike comment, pictures and videos of other users
 - c. Follow/Unfollow other users
9. Edit Pictures(remove it)
 - a. Apply effects to pictures (sepia, grayscale, etc.)
10. Hide Pictures/Videos
11. Activity
 - a. View activity log of user-activity on the PixaGram
12. Offline Functionality:
 - a. Certain parts of the application should be available in absence of connectivity.
 - b. Relevant areas on the screen should display "Connectivity Not Available"
13. BONUS REWARDS/SCORE Feature☺remove it)
 - a. To implement offline image upload functionality such that user can upload content when offline. It will sync with backend when connected.

In this micro layer you will develop, responsive UI of the application using HTLM5, HTML5 API, CSS3 and Bootstrap/Material.

2.2 PAGES

As per the navigation bar (each is independent page):

1. Upload Media Page
 1. -> Single Media Upload Page
 2. -> Multiple Media Upload Page
2. My Media Page
 1. -> Media Detail Page
3. Followers/Following Page
 1. -> Follower Page -> Follower Media Detail Page
 2. -> You Follow User Page -> You Follow Media Detail Page
4. Account Details Page
 - a. Sign In Page
 - i. Blocked Accounts Page
 - ii. Newsfeed Page
 - iii. Account Update Page
 - iv. Search Page
 - v. Logout Link
 - b. Register Page

3 PAGES (DETAILS)

3.1 SIGN IN PAGE

3.1.1 Sign In Page Requirement

1. It allows user to sign-in with registered credentials.
2. If the user is not registered, user may register before signing-in.
 - a. Username.
 - b. Password
 - c. Email
3. Clicking on any link: Upload Media, My Media, Followers/Following will redirect users to Login page, if the user is not logged-in.
4. On register page, there is check button to check if username is already in use.

3.1.2 Sign-In Page Wireframe

Logo	Upload Media	My Media	Followers/Following	Account
Profile Image	@welcome			
Account	Login			
Login	Username			
Register	Password			
		Login		

3.1.3 Register Page Wireframe

3.2 UPLOAD MEDIA PAGE

3.2.1 Upload Media Page Requirement

- It will have two sub-pages
 - Single Media Upload Page(this should be fine)
 - Multiple Media Upload Page
- It allows you to upload media in two formats
 - Images - png, jpeg, gif(not compulsory for all types)
 - Video – wmv, avi, mp4(not compulsory)
- User should be able to upload single/multiple media items using drag and drop from file explorer in the host operating system in respective pages. It is recommended that you should first create the UI for single media upload. Once it is done and approved, then create the UI for multiple media upload.
- By default, first image which you upload will be used as a default profile picture for your account.
- In case of video being uploaded, default image should be used as a poster/thumbnaill.
- Each upload item should have following three fields:
 - Title
 - Description
 - Tags
 - Effects – sepia, greyscale, brightness, contrast etc.
 - Should be disabled initially. Enabled only after the media is uploaded and saved.
- User should be able to add multiple tags; each separated by comma (,)
- User should be able to save the uploaded media item/s
- As you are not developing the UX (Angular or React); you must use HTML5 Web Storage API to save data for single media upload page
- The JSON data for single media upload page will saved in Web Storage on click of Save/Upload button

3.2.2 Upload Single Media Page Wireframe

Logo	Upload Media	My Media	Followers	Account	
Profile Image	@username				
Upload Media	New Media Page				
Single Media	Browse	Browse	Upload	OR Drag & Drop here and click on upload	
Multiple Media	Title				
	Description				
	Tags				
	Effects	Sepia	Grey		Brightness

3.2.3 Upload Multiple Media Page Wireframe

Logo	Upload Media	My Media	Follower's/Following	Account
------	--------------	----------	----------------------	---------

Profile Image	@username
---------------	-----------

Upload Media	New Media Page				
Single Media	Browse	Browse	Upload All	OR Drag & Drop here and click on upload	
Multiple Media					
	Title				
	Description				
	Tags				
	Effects	Sepia	Greg	Brightness	Contrast

Title				
Description				
Tags				
Effects	Sepia	Greg	Brightness	Contrast

Title				
Description				
Tags				
Effects	Sepia	Greg	Brightness	Contrast

3.2.4 JSON Structure for Single Media File Upload

1. The following is the structure of the JSON object for single media upload page:

```
1. {
2.   "id": 1,
3.   "title": "Full Stack Freelancer",
4.   "type": "video",
5.   "videoposter": "poster.jpeg",
6.   "description": "It is great to be a full stack developer!",
7.   "tags": [
8.     {
9.       "id": 1,
10.      "tag": "fsd"
11.    },
12.    {
13.      "id": 2,
14.      "tag": "freelancer"
15.    },
16.    {
17.      "id": 3,
18.      "tag": "full stack"
19.    },
20.    {
21.      "id": 4,
22.      "tag": "full stack cognizant"
23.    }
24.  ],
25.  "effect": "greyscale",
26.  "filename": "freelancer_poster.jpeg",
27.  "filetype": "image/jpeg",
28.  "filesize": "541144",
29.  "uploaddate": "31-08-2018",
30.  "uploadtime": "1331",
31.  "defaultprofile": 0,
32.  "likes": 0,
33.  "unlike": 0,
34.  "shares": 0,
35.  "numberofcomments": 0
36. }
37. //type can be 'video' or 'image'
38. //in case of "image", the value of "videoposter" is ""
39. //in case of "video", the value of "defaultprofile" is 0
```

2. You may change the JSON object structure as per your programming needs.

3.2.5 JSON Structure for Multiple Media File Upload

1. The following is the structure of the JSON object for multiple media upload page:

```
1. [
2.   {
3.     "id":1,
4.     "title":"Full Stack Freelancer",
5.     ...
6.     ...
```

```
7. "uploadtime":"1331"
8. },
9. {
10. "id":2,
11. "title":"Technology Solutions",
12. ...
13. ...
14. "uploadtime":"1313"
15. },
16. {
17. "id":3,
18. "title":"Development Stack",
19. ...
20. ...
21. "uploadtime":"1111"
22. }
23. ]
```

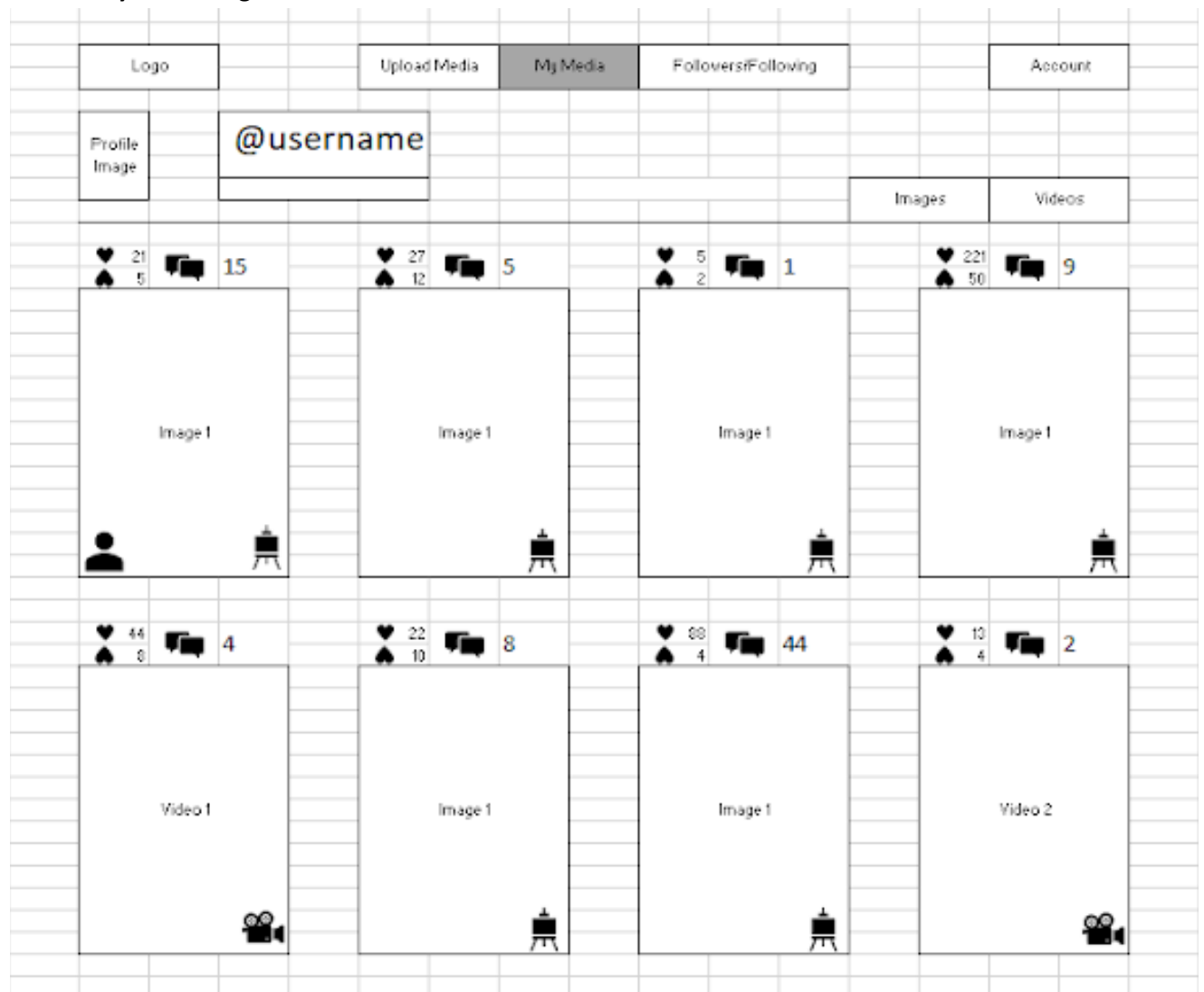
2. You may change the JSON object structure as per your programming needs.

3.3 MY MEDIA PAGE

3.3.1 My Media Page Requirement

1. This page contains all the media uploaded by you along with other information.
2. It will display your username on top along with (Follow/Unfollow) toggle button. Any user can click on Follow/Unfollow button to follow or unfollow you. It will be disabled for you as you are the account owner.
3. It will display all media items uploaded by you, as a user, in a grid format.
4. It will contain two more toggle button i.e. Images, Videos
5. If “Images” is activated, then only images are displayed.
6. If “Videos” is activated, then only videos are displayed.
7. By default, both are activated.
8. Each media item will be displayed in one cell of responsive grid with following information:
 - a. Emoji Icon + number of like. (not clickable)
 - b. Emoji Icon + number of unlike. (not clickable)
 - c. Emoji Icon + number of comments.
 - d. Emoji Icon to specify whether it is used for default profile picture.
9. User should be able to click on the media (image/video) thumbnail to view further media details and interact with the media.

3.3.2 My Media Page Wireframe

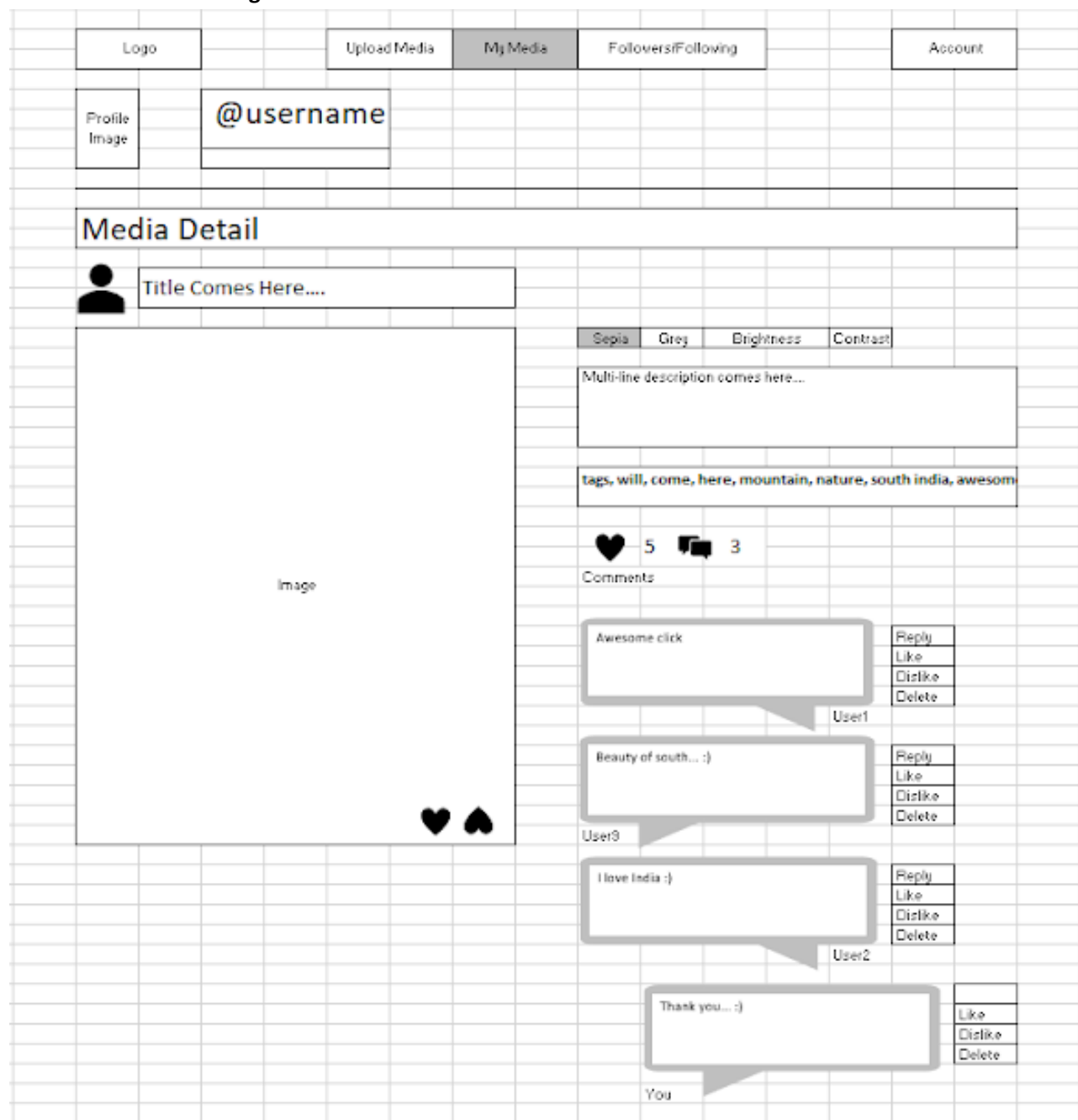


3.4 MEDIA DETAIL PAGE

3.4.1 Media Detail Page Requirement

1. It will display your username on top along with (Follow/Unfollow) toggle button
2. If Image:
 - a. Original dimension.
 - b. Name of effect applied.
 - c. "Make Profile Picture" button, clicking on which will make it a default profile picture for your account. This button is disabled when you are browsing the collection of any other user.
3. If Video:
 - a. HTML5 video player
 - i. default play/pause/volume button.
 - ii. video player should also have custom playback progress bar.
 - iii. Full screen feature
 - iv. Mute/unmute feature
 - v. Replay feature
 - vi. Loop feature
4. Media title
5. Emoji Icon + number of like. (clickable only once)
6. Emoji Icon + number of unlike. (clickable only once)
7. Emoji Icon + number of comments.
8. Emoji Icon to specify whether it is used for default profile picture.
9. List of comments.
10. Name (hyperlink) of the user who made the comment in front of each comment
11. Link to reply to any comment which will open reply text field.
12. Text field to add new comment to your own post.

3.4.2 Media Detail Page Wireframe



3.5 FOLLOWERS/FOLLOWING PAGE

3.5.1 Followers/Following Page Requirement

1. Will display the all the followers of your PixoGram account and the users you are following.
2. It will display all followers/following in grid view.
3. Each follower/following profile picture will display below information:
 - a. Emoji Icon + total number of like. (not clickable)
 - b. Emoji Icon + total number of unlike. (not clickable)
 - c. Emoji Icon + total number of comments.
4. User may decide the profiles to be displayed on the page by clicking the buttons on top right:
 - a. Followers Button – Will display all followers of your pixogram account
 - b. Following Button – Will display all accounts you are following
 - c. By default, both buttons are enabled.
5. User can click on any user profile picture and navigate to the “My Media Page” of respective user.
6. Once on the “My Media Page” of the respective user, you can click on any media item to navigate to the respective “Media Detail Page” page.
7. Once on media detail page of the respective user for respective media:
 - a. It will display username on top along with (Follow/Unfollow) toggle button
 - b. If Image:
 - i. Original dimension.
 - ii. Name of effect applied.
 - iii. “Make Profile Picture” button is disabled.
 - c. If Video: (optional)
 - i. HTML5 video player
 1. default play/pause/volume button.
 2. video player should also have custom playback progress bar.
 3. Full screen feature
 4. Mute/unmute feature
 5. Replay feature
 6. Loop feature
 - d. Media title
 - e. Emoji Icon + number of like. (clickable only once)
 - f. Emoji Icon + number of unlike. (clickable only once)
 - g. Emoji Icon + number of comments.
 - h. Emoji Icon to specify whether it is used for default profile picture.
 - i. List of comments
 - j. Name (hyperlink) of the user who made the comment in front of each comment
 - k. Link to reply to any comment which will open reply text field.
 - l. Text field to add new comment to respective user’s post.

3.5.2 Followers/Following Page Wireframe

Logo				Upload Media		My Media		Followers/Following				Account			
Profile Image		@username													
										Followers		Following			
	451		12		123		251		10		85		553		
	55		101				35		111				53		
Profile Image				Profile Image				Profile Image				Profile Image			
Follow/UnFollow				Follow/UnFollow				Follow/UnFollow				Follow/UnFollow			
	145		8		117		81		5		45		44		
	21		51				15		51				8		
Profile Image				Profile Image				Profile Image				Profile Image			
Follow/UnFollow				Follow/UnFollow				Follow/UnFollow				Follow/UnFollow			
	221		8		88		221		8		88		45		
	45		100				15		51				45		
Profile Image				Profile Image				Profile Image				Profile Image			
Follow/UnFollow				Follow/UnFollow				Follow/UnFollow				Follow/UnFollow			

3.6 ACCOUNT PAGE

It will consist of 4 sub-pages

- m. Account Details
- n. Activity Log/Newsfeed
- o. Blocked Users
- p. Search
- q. Logout link

3.6.1 Activity Log/Newsfeed Page

3.6.1.1 Activity Log/Newsfeed Page Requirement

1. Will display the log of all the activity user does on the "PixoGram" app till date.
 - a. E.g.
 - i. You shared the "iiht" user media image with title "Full Stackathon"
 - ii. You liked the "google" users media video with title "Google I/O 2019"
 - iii. You commented "future is awesome..." on "android" users media image with title "Android 9 - Pie"

3.6.1.2 Activity Log/Newsfeed Page Wireframe

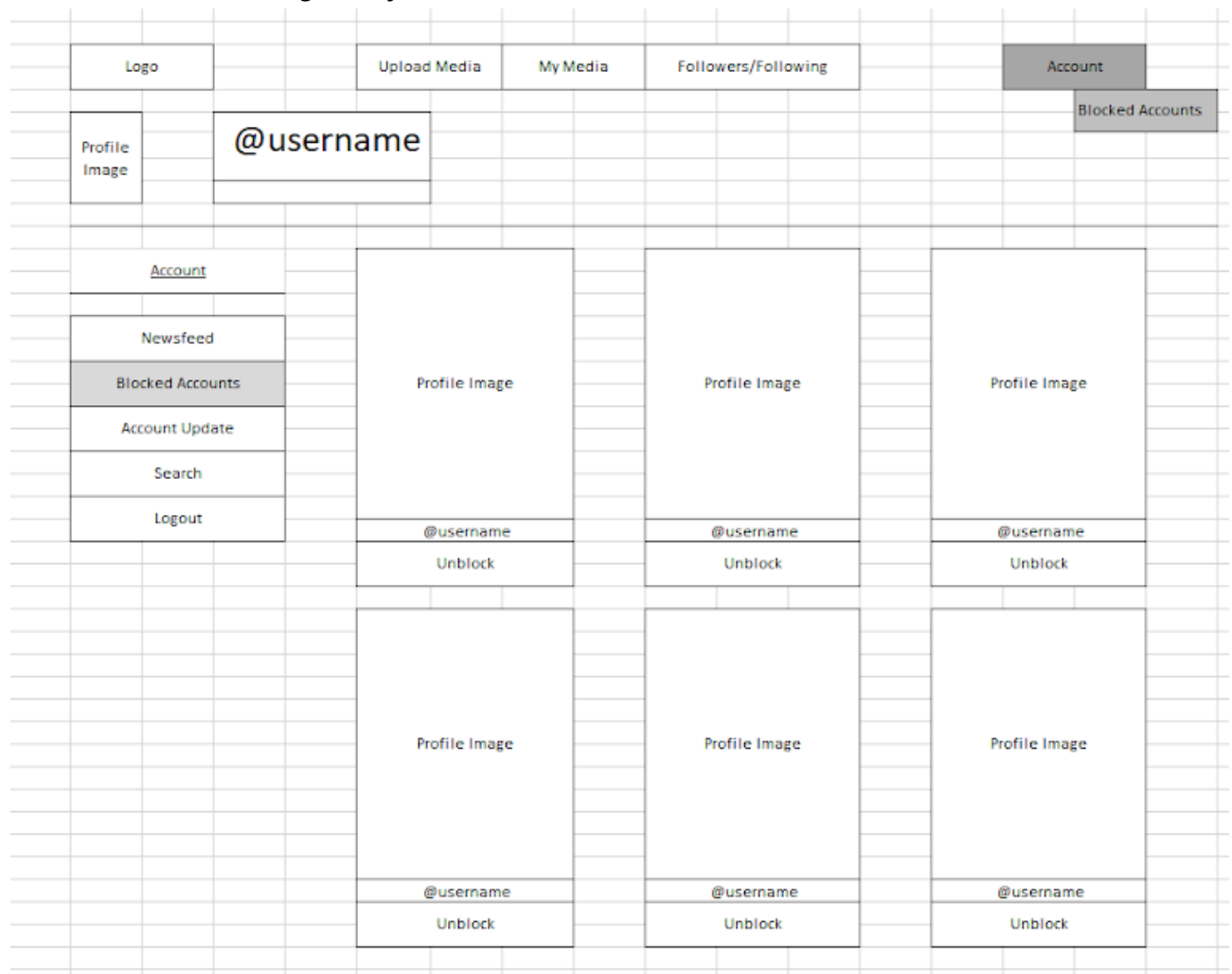
Logo	Upload Media	My Media	Followers/Following	Account	Newsfeed
Profile Image	@username				
Account	Today	13:00	You shared the "iiht" user media image with title "Full Stackathon"		
			You liked the "google" users media video with title "Google I/O 2019"		
Newsfeed			You commented "future is awesome..." on "android" users media image with title "Android 9 - Pie"		
Blocked Accounts	31-Oct-18	14:00	You liked the "IoT Stack Beginners" picture		
Account Update	30-Oct-18	08:00	You shared the "google" user media image with title "programming for all"		
Search			You liked the "google" users media video with title "IoT prototyping with Node.js and Firebase"		
Logout			You commented "I also want to" on "android" users media image with title "Functional Programming"		

3.6.2 Blocked Users Page

3.6.2.1 Blocked Users Page Requirement

2. It displays the profile of the accounts who are blocked by you.
3. Blocked accounts cannot view your account on PixoGram.

3.6.2.2 Blocked User Page Wireframe



3.6.3 Account Details Page

3.6.3.1 Account Details Page Requirement

1. It allows you to change the username. Before changing, you need to check if the username is available.
2. You can update email and password.
3. Password validation will follow the same rule as that of password in user registration module.

3.6.3.2 Account Details page Wireframe

Logo	Upload Media	My Media	Followers/Following	Account
Profile Image	@username			Account Update
Account				
Newsfeed	Username	<input type="text"/>	Check	
Blocked Accounts	Password	<input type="text"/>		
Account Update	Repeat Password	<input type="text"/>		
Search	Email	<input type="text"/>		
Logout		Update		

3.6.4 Search Page

3.6.4.1 Search Page Requirement

1. User should be able to search content via tags, media title, media description and usernames

3.6.4.2 Search Page Wireframe

Logo	Upload Media	My Media	Followers/Following	Account
Profile Image	@username			Search
Account	Search Media, tags and Users....			Search
Newsfeed				
Blocked Accounts				
Account Update				
Search				
Logout				

4 TECHNICAL SPECIFICATION – UI LAYER

SOLUTION DEVELOPMENT ENVIRONMENT

4.1 UI LAYER

Framework(s)/SDK/Libraries	Version
HTML5	-
CSS3	-
Bootstrap/Material	-
GIT Basics	-
Jenkins Basics	-
Docker Basics	-

4.2 EDITORS

Name	Version
Visual Studio Code	-

5 IMPORTANT INSTRUCTIONS

1. Follow the design specifications mentioned in the case study. You are free to improvise certain specifications mentioned in the case-study. But, for each such improvisation, you should keep the concerned POC informed. POC will get in touch with concerned team at IIHT.
2. You should stay motivated to initiate such and specific communications as it may have positive influence on the evaluation scores.
3. Please make sure that your code does not have any compilation errors while submitting your case study solution.
4. **The final solution should be deployed in docker on some http server.**
5. Implement the code using best design standards.
6. **The UI for the app should be multilingual.**
7. The **logo for the app should be in SVG format**. Use logo of your choice.
8. UI should be **responsive** across multiple devices.
9. It should be the **progressive web app** such that certain parts of the application are accessible in absence of connectivity.
10. **Dynamic functionality is not required**. Since it is UI Layer, use static content where required.

6 OTHER FULL STACK LAYERS

6.1 UI LAYER – JUST FOR INFORMATION (APPLICABLE FOR PRESENT CASE STUDY)

HTML5	-
CSS3	-
Bootstrap/Material	-

6.2 UX LAYER (NOT APPLICABLE FOR PRESENT CASE STUDY)

Angular or	6
React	16
Javascript & JQuery	-
Typescript	-

6.3 BACK END PROGRAMMING LAYER (NOT APPLICABLE FOR PRESENT CASE STUDY)

Java SE	8 or above
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6.4 MIDDLE TIER FRAMEWORK LAYER (NOT APPLICABLE FOR PRESENT CASE STUDY)

Technology	Framework(s)/SDK/Libraries	Version
Spring Framework	Spring MVC	5.0 or above

6.5 ORM & INTEGRATION LAYER (NOT APPLICABLE FOR PRESENT CASE STUDY)

Technology	Framework(s)/SDK/Libraries	Version
Spring	Spring Boot	2.0
Java JPA	Hibernate	5.0 or above
	Spring Data	2.0

6.6 DATABASE LAYER (NOT APPLICABLE FOR PRESENT CASE STUDY)

MySQL	MySQL	7.x +
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6.7 ANCILLARY LAYER (NOT APPLICABLE FOR PRESENT CASE STUDY)

Technology	Framework(s)/SDK/Libraries	Version
Source Code Management Tool	GIT	2.18
Build Tool/JAVA Stack	Maven	3.5.x
Testing Tool/JAVA Stack	Junit/Spring Test	4.x/5.x
Javascript Dependency Management Tool	NPM	6.x.x

6.8 DEPLOYMENT & INFRA (NOT APPLICABLE FOR PRESENT CASE STUDY)

Technology	Framework(s)/SDK/Libraries	Version
Docker	-	17.06.2
Apache Tomcat	-	9.0
Jenkins	-	2.121.2