

Applied User Interface Design Case Study

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Assignment: Individual Case Study – Applied User Interface Design

Chosen Interfaces:

1. Google Classroom
2. Instagram

Step 1 : Chosen Interfaces

I chose **Google Classroom** and **Instagram** because I use both almost every day.

They have different UI design styles:

App	Purpose	Design Style
Google Classroom	For learning and submitting assignments	Material Design (Google's design language – uses layers, shadows, and floating buttons)
Instagram	For sharing photos, stories, and reels	Flat Design (simple, minimal, bright colors, fewer shadows)

Step 2: Deep UI Element Analysis (20 marks)

Google Classroom:

UI Element	Type	Purpose	Good Design Practice?	Notes
Login Button	Input	Allows user to sign in	<input checked="" type="checkbox"/> Yes	Clear and easy to find
Class Card	Output	Displays each class info	<input checked="" type="checkbox"/> Yes	Good layout and spacing
“+” Join Button	Input	Adds or joins a class	<input checked="" type="checkbox"/> Yes	Floating button, easy to access
Assignment Tab	Helper	Organizes assignments	<input checked="" type="checkbox"/> Yes	Keeps content structured
Stream Feed	Output	Shows class updates	<input type="checkbox"/> Partly	Can feel crowded

Comment Box	Input	Adds comments under posts	<input checked="" type="checkbox"/> Yes	Quick feedback interaction
Notification Bell	Output	Shows new updates	<input checked="" type="checkbox"/> Yes	Clear and visible icon
Navigation Drawer	Helper	Moves between sections	<input checked="" type="checkbox"/> Yes	Follows Material Design
Submit Button	Input	Turns in assignment	<input checked="" type="checkbox"/> Yes	Green color shows confirmation
Grades Tab	Output	Shows student marks	<input checked="" type="checkbox"/> Yes	Simple, easy to read

Instagram:

UI Element	Type	Purpose	Good Design Practice?	Notes
Home Button	Helper	Navigates to home feed	<input checked="" type="checkbox"/> Yes	Clear icon placement
Story Circles	Output	Displays user stories	<input checked="" type="checkbox"/> Yes	Circular shape draws attention
Like Button (❤)	Input	Likes a post	<input checked="" type="checkbox"/> Yes	Clear feedback (turns red)
Comment Icon	Input	Opens comment section	<input checked="" type="checkbox"/> Yes	Easy to tap
Explore Tab	Helper	Discover new content	<input checked="" type="checkbox"/> Yes	Simple grid layout
Message Icon	Input	Opens chat	<input checked="" type="checkbox"/> Yes	Smooth transition
Profile Picture	Output	Identifies users	<input checked="" type="checkbox"/> Yes	Visually appealing
Reel Button	Input	Plays short videos	<input checked="" type="checkbox"/> Yes	Modern and interactive
Notification Tab	Output	Shows recent activity	 Partly	Sometimes cluttered
Share Button	Input	Sends post to others	<input checked="" type="checkbox"/> Yes	Consistent symbol use

Step 3: Principles Evaluation

UI Principle	Google Classroom Example	Instagram Example
Hierarchy	Uses bold titles like “Classwork” to guide attention.	Feed posts use large images at the top to grab focus.
Consistency	Buttons, icons, and fonts are consistent with Google’s apps.	Colors and icons stay the same across screens.
Contrast	White background and colorful buttons stand out well.	Uses black/white backgrounds with bright icons.
Alignment	Content aligns neatly in cards and grids.	Post layouts are perfectly centered and balanced.
Proximity	Related tools (comment, turn-in) appear close to each post.	Like, comment, share icons grouped below each post.
Accessibility	Supports text enlargement and screen readers.	Large icons and alt-text for images help accessibility.
Feedback	Shows pop-up when you “Turn In” work.	Heart animation when liking a post gives feedback.

Both apps apply **most UI principles**, but **Classroom’s stream** can look cluttered, and **Instagram’s notifications** can be overwhelming.

Step 4: Design Style Analysis

Feature	Google Classroom (Material Design)	Instagram (Flat Design)
Visual Depth	Uses layers and shadows for buttons and cards.	Flat shapes, minimal shadows.
Color Style	Soft colors with contrast emphasis.	Bright, bold colors and gradients.
Usability	Buttons “float,” easy to notice.	Simple, fast loading.
Loading Time	Slightly heavier due to shadows.	Loads faster, lightweight.

Visual Clarity	Very clear hierarchy and order.	Very clean and simple.
Overall Feel	Professional and structured.	Fun and social.

Most user-friendly:

➡ **Instagram**, because it's faster, simpler, and easy to navigate for quick tasks.
 However, **Google Classroom** is better for organization and hierarchy in school tasks.

Step 5: Redesign Challenge

I chose **Google Classroom** to redesign.

Problematic Screen:

The **Stream page** (main feed) looks crowded because posts, comments, and assignments mix together.

3 Usability Issues:

1. Too many posts — no visual separation between announcements and assignments.
2. Small font for due dates — easy to miss deadlines.
3. Hard to find the “Turn in” button inside the stream.

Proposed Redesign:

- **Add tabs** (“Announcements,” “Assignments,” “Questions”) to separate content.
- **Use color highlights** for due assignments (e.g., yellow for urgent).
- **Make the “Turn in” button larger and always visible** on assignment posts.

Justifications:

Change	Principle Used	Benefit
Tabs for content	Hierarchy & Proximity	Easier navigation and separation
Color highlights	Contrast	Important info stands out
Larger Turn-in button	Accessibility & Feedback	Easier to notice and click for all users

Step 6: Reflection & Accessibility Review (10 marks)

This case study helped me understand that **a good UI is not just about beauty**, but how easily users can find and use what they need.

Accessibility made me realize that **not everyone interacts the same way** — some users need larger buttons, higher contrast, or voice feedback.

Designing for all users made me think about **simplicity, feedback, and inclusiveness**.

For example, adding text-to-speech or color contrast adjustments in Google Classroom would make it more accessible to visually impaired users.

“Good design is invisible — it helps people do things without confusion.”