IT: App Development Summer Work

This summer work introduces you to two units you will study in Year 1:

- F160 — Fundamentals of Application Development: types of software, development models, operating systems, and design documents.
- F162 — Designing and Communicating UX/UI Solutions: user experience, interface design, wireframing, and personas.

Submission: hand in as a single document (Word or PDF). Include your name and the date.

Task 1 — Application Research (1.5–2 hours)

Research TWO real applications from TWO different categories from the list below. For each app, complete the research table on the following pages.

Categories

Category	**Example Applications (you may choose a different app from the same category)**
Communication	WhatsApp, Slack, Discord, Microsoft Teams, Signal
Educational	Duolingo, Khan Academy, Kahoot!, Quizlet
Entertainment	Netflix, Spotify, YouTube, BBC iPlayer, Twitch
Productivity	Microsoft Office, Notion, Google Drive, Trello, Todoist
Games	Minecraft, Fortnite, Among Us, Stardew Valley

What to Research

For each app, find and record the following information. Keep your answers concise. A few sentences or a short bullet list is enough for each row.

App 1

Research Area	Your Notes
Name and category	
Brief description	What does this app do and who is it for?
Operating systems	List every platform it runs on (Windows, macOS, iOS, Android, Web, etc.)
Key features	List 4–5 main features that define the app
Classification	Is it Off-the-Shelf, Custom Off-the-Shelf, or Bespoke? Explain why.
Development model	Which model was likely used (e.g. Waterfall, Agile)? Give reasons.
Sources used	List where you found your information

App 2

Research Area	Your Notes
Name and category	
Brief description	What does this app do and who is it for?
Operating systems	List every platform it runs on (Windows, macOS, iOS, Android, Web, etc.)
Key features	List 4–5 main features that define the app
Classification	Is it Off-the-Shelf, Custom Off-the-Shelf, or Bespoke? Explain why.
Development model	Which model was likely used (e.g. Waterfall, Agile)? Give reasons.
Sources used	List where you found your information

Useful link: https://www.csnewbs.com/f160-1-3-1-application-types

Task 2 — UX/UI App Design (2–3 hours)

Design a simple mobile app concept in response to one of the client briefs below. This must be an original design. Do not copy an existing app. Use the brief as your starting point.

This task mirrors the kind of work you will do in your F162 assessment.

Choose a Client Brief

Select ONE brief from the three options below and write your choice at the bottom of the table.

Brief	Scenario
Brief A	A local community centre wants an app to help residents book sports hall sessions, view upcoming events, and receive announcements. Users range from elderly residents with limited tech experience to teenagers comfortable with smartphones.
Brief B	A secondary school wants an app for students to track homework deadlines, receive teacher feedback, and access study resources. It needs to work for students with varying reading abilities.
Brief C	A GP surgery wants an app to help patients manage repeat prescriptions, view appointment times, and access basic health advice. Accessibility for older patients is a key requirement.

My chosen brief: _____

Task 2A — User Persona

Before designing anything, identify who you are designing for. Create a fictional user persona — someone who represents a typical user described in your chosen brief.

Section	Your Answer
Name and age	
Occupation or role	e.g. student, teacher, nurse, retired
Technical experience	Beginner / Intermediate / Advanced — briefly explain
Specific needs (3–4)	What does this person need the app to do? Be specific, not vague.
Context of use	When and where would they use the app?
Accessibility consideration	Does this user have any needs the design should account for?

Tip: specific needs are better than vague ones. For example: 'view appointment date and time without phoning the surgery' is better than 'use the app easily'.

Useful link: https://www.uxdesigninstitute.com/blog/what-are-ux-personas/

Task 2B — Wireframe Sketches

Create wireframe sketches for THREE screens of your app. Wireframes show structure and layout only — no colour, no detailed graphics. Use boxes, labels, and arrows to show where things go.

Screen	Purpose
Main / Home Screen	The first screen users see. Should clearly show what the app does and give quick access to key features.
Primary Feature Screen	The main functionality — e.g. booking form, search results, dashboard, content viewer.
Settings / Profile Screen	Where users manage their preferences, account details, or accessibility options.

You can draw by hand and photograph it, or use a free digital tool:

- https://excalidraw.com/ — works in a browser, no account needed
- PowerPoint or Word — draw shapes to represent the layout

Screen 1: Main / Home Screen	Draw or insert your wireframe here

Screen 2: Primary Feature Screen	Draw or insert your wireframe here

Screen 3: Settings / Profile Screen	Draw or insert your wireframe here

Task 2C — Annotate Your Wireframes

Add written annotations to each wireframe. You can write directly on the image or use a numbered key below each one. Each annotation must be clearly linked to a specific element.

You must address all four areas below — at least once per screen:

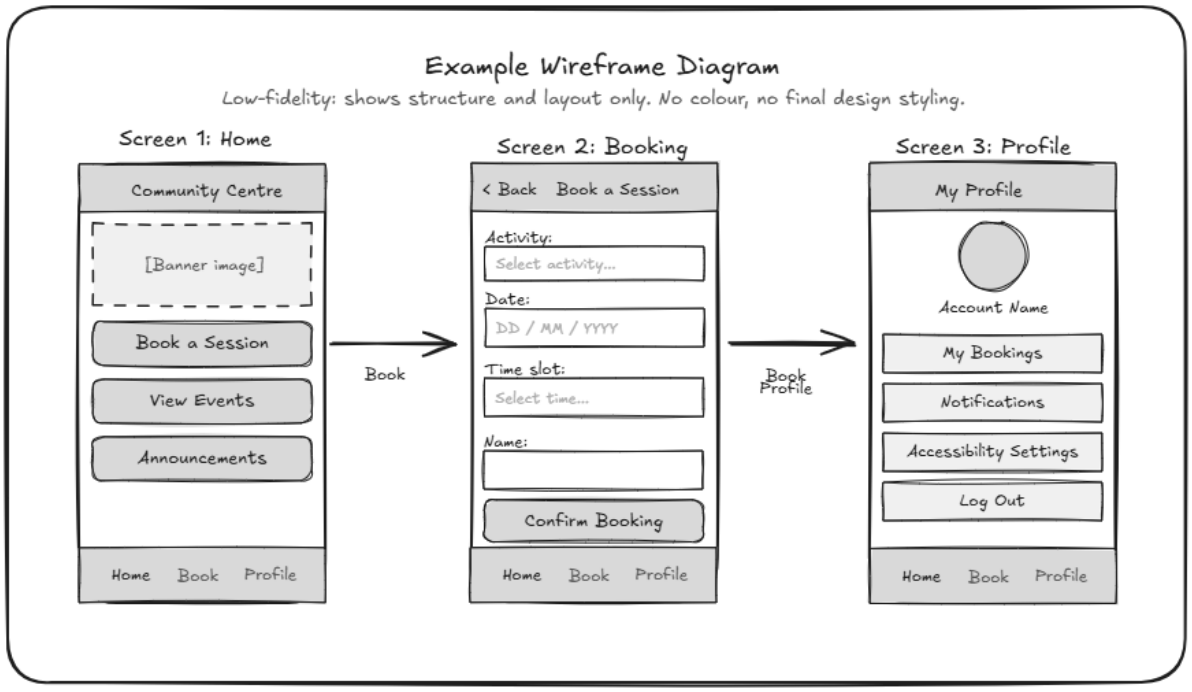
Area	What Your Annotation Must Explain
Navigation	How do users move between screens? Label all buttons and links that take the user somewhere.
Visual hierarchy	What is the most important element on this screen? How have you shown that through size, position, or layout?
User interaction	What can the user tap, swipe, or type into? Label every interactive element.
Accessibility	How does your design consider users with different needs? Give at least one example per screen.

Example (Navigation): 'The bottom bar contains four icons. Home, Search, Bookings, Profile. Users can tap any icon to go directly to that section without going back to the home screen.'

What We Are Looking For

- Research quality - accurate information, correct use of classification and development model terms
- Technical vocabulary - correct use of terms such as Off-the-Shelf, Bespoke, Agile, Waterfall, UX, UI, wireframe, persona, visual hierarchy
- Design thinking - does your persona have specific realistic needs? Do your wireframe decisions logically respond to the brief?
- Annotation quality - all four areas addressed on all three screens, with specific explanations not just labels
- Presentation - clear, well-organised document with your name, date, and sources included

Example Images



Self-Assessment Checklist

Before handing in, work through this list. If you cannot tick something, go back and address it.

Done	Task	Item
	Task 1	I researched TWO apps from TWO different categories
	Task 1	I completed the research table for both apps
	Task 1	I identified and explained the classification for each app
	Task 1	I suggested a development model for each app and gave reasons
	Task 1	I listed sources for each app
	Task 2A	My persona has a name, age, occupation, and experience level
	Task 2A	My persona has 3–4 specific needs (not vague)
	Task 2A	I described when and where my persona would use the app
	Task 2A	I identified at least one accessibility consideration
	Task 2B	I have wireframes for all THREE screens, each clearly labelled
	Task 2B	My wireframes show layout and structure only — no detailed colour or graphics
	Task 2C	I have annotated navigation on each screen
	Task 2C	I have annotated visual hierarchy on each screen
	Task 2C	I have labelled at least one interactive element per screen
	Task 2C	I have addressed accessibility in my annotations
	Overall	My work is a single document with my name and date on every page