AAQ in Computing: Application Development

Please complete one line from the task box below. All students must complete the middle box.

Research the Role of an App Developer Write a short report or presentation about what an application developer does. Include: Key responsibilities, skills required, Tools/technologies commonly used, and an example job description from a real company.	**App Store Analysis** Pick two apps from the App Store or Google Play. For each, answer: What problem does it solve? Who is the target audience? How is the user experience (UX)? What would you improve?	**Create a Flowchart** Design a flowchart for a basic app process, e.g., login and register, or ordering food. Use flowchart symbols to represent steps and decisions.
Compare App Types Create a comparison table between: Native apps Web apps Hybrid apps Include pros, cons, and at least one real-world example of each.	**Reflect on Digital Skills** Write a short reflection: What digital skills have you already developed? Which areas do you feel confident in? What would you like to improve before starting the course?	**Explore User Interface Design** Design a simple user interface (UI) for a mobile app idea (e.g., a to-do list, fitness tracker, or school planner). Include: Wireframes for at least 2 screens Clear layout and design choices Labels and navigation elements
Investigate Software Development Lifecycles Summarise the Software Development Life Cycle (SDLC) stages (e.g., Waterfall or Agile): What happens at each stage? Why is it important? Use diagrams or mind maps if helpful.	**Create a poster, information sheet or fact file, for each of the three types of operating systems.** Include the following information: Characteristics Advantages Disadvantages Example of how it could be used.	**Learn Basic Python** Complete a short Python tutorial using W3Schools or Replit. Suggested goals: Print text and take input Use variables and conditionals Write a basic calculator Submit screenshots of your code and outputs.

Useful resources/websites

- https://www.csnewbs.com/f160-fundamentalsofappdevelopment
- https://www.geeksforgeeks.org/software-engineering/software-development-life-cycle-sdlc/
- https://www.drawio.com/

Suggested books/reading list

- C Charles et al, Cambridge Advanced National (AAQ) in Computing: Application Development Student Book (Cambridge Advanced Nationals), Cambridge University Press, 2025.
- Blogs from https://www.computerweekly.com/
- PM Heathcote, Python Challenge, PG Online, 2021.
- PM Heathcote, Learning to Program in Python, PG Online, 2020.