

BTEC DIT Component 1: Pre-Reading Resource

Component Objectives

By the end of Component 1, you should be able to:

- Understand different types of user interfaces and their features.
- Use planning tools and methods to design digital products.
- Create and evaluate your own user interface.

1. What is a User Interface?

Types: Text-based, GUI (WIMP), voice-controlled, touch/sensor-based.

Applications: Smartphones, smartwatches, household appliances, embedded systems.

Useful Resource: <https://www.bbc.co.uk/bitesize/guides/zc472nb/revision/1>

2. Designing for Users

Accessibility needs: Visual, auditory, motor, cognitive.

User skill levels: Novice to expert.

Demographics: Age, culture, experience.

Useful Resource: <https://www.w3.org/WAI/fundamentals/accessibility-intro/>

3. UI Design Principles

Colour schemes, typography, layout, information density, consistency.

Tools: Wireframes, mockups, storyboards.

Video: <https://www.youtube.com/watch?v=3eBzMvu4YGg>

4. Planning and Managing Projects

Planning tools: Gantt charts, task lists, mind maps.

Methodologies: Waterfall vs Agile vs Scrum.

Tools: <https://www.canva.com/gantt-charts/>, <https://www.mindmeister.com/>

Video: <https://www.youtube.com/watch?v=ed-z3nK9EzI>

5. Creating a Prototype

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Prototyping software: PowerPoint, Figma, Adobe XD, Balsamiq.

Tools: <https://www.figma.com/>

Video: <https://www.youtube.com/watch?v=FTFaQWZBqQ8>

6. Review and Evaluate Your Work

Review against user requirements, accessibility, and design principles.

Provide suggestions for improvement.

Vocabulary to Know

GUI, Accessibility, Wireframe, Prototype, Gantt Chart, Milestone,

Agile / Waterfall, Iteration, Constraint