

## Supplementary details for prototyping assessment

### Prototyping

This assessment places you in the role of a team of HCI specialists who have been recruited by **NB LearnTech** to help support their plans towards cornering the market in multi-user, real-time synchronous systems for computer assisted instruction. The company wishes to explore new and innovative ideas for this type of educational system.

The organisation currently provides instructional resources, covering many subjects including computer science. The organisation has approached you to design a new multi-user interface as a proof of concept, since it is their belief that such an approach will play a key role in future. Current resources tend to be standalone and individual-centred and lack real-time monitoring and tracking. Whilst there are multi-player games available, they lack the educational element central in serious games.

The proof of concept should be based on the subject of Fitts Law. Your team are to develop a multi-user interface for a multi-player serious game intended to deliver an element of competitive fun and enjoyment whilst learning this subject. As a team you will need to decide the application area such a serious game will be used. Examples include:

- Gaming for students
- Training for developers
- Exercise for online marketing officers

As part of the design, only the user interface for the gaming elements should be considered. The computer assisted instruction (CAI) design should include the main control functions and features end users need by small groups of learners learning together synchronously in real time. The solution must aim to enhance the effectiveness of learning the topic/concepts of the subject. Note: general system features (e.g. account registration and login, notifications, and security settings) should not be included, as these are the minimum features expected in most UIs today. Attention made to safety and accessibility implications are also required.

Your UI/UX design process should follow the PACT (People, Activities, Contexts and Technologies) development process covered in the course. You should also use those approaches and techniques, such as the rich pictures, personas, scenarios storyboards, journey maps, service blueprints, cross channel ecology map, wireframes, moodboards, etc. which have been introduced in the course.

With this in mind, you should develop a **low-fidelity** prototype illustrating the multi-user UI features and functions present in your new CAI system. The solution should build on best UI/UX design practices, and HCI theories, principles and guidance.

In the case of a **low-fidelity** solution, a mock-up in the form of a PowerPoint presentation incorporating animations if wish should be considered. The prototype is **not** to involve the full implementation and deployment of any system. Only the UI is to be developed, leaving any storage or business logical to be simulated. This is strictly a design exercise and therefore time should not be wasted undertaking tasks outside the scope of the remit.

Your design solution should not only address interaction considerations but also standards, legal and ethical aspects.

IMPORTANT: At no point throughout the prototyping process should the general public or companies be contacted.