# COMP640: Concept and Prototype wireframe assessment

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| Ideation due: 5pm, 9th December 2022 | Worth: 15% of Overall Mark |
| Final Concept due: 5pm, 10th January 2023 | Worth: 20% of Overall Mark |
| Prototype due: 5pm, 13th February 2023 | Worth: 30% of Overall Mark |

## Scenario

Foster parkrun is a free, timed 5km run, walk and jog, held every Saturday morning at Foster Park in Rolleston. At Foster parkrun, 100-150 runners take part each week.

Each runner has a number, this is issued as a computer scannable barcode which they bring with them to each event.

The event is run by local volunteers supported by a regional (Asia-Pacific) and global (UK Headquartered) staff team. There are 8 to 15 volunteers most weeks.

The event is held outdoors, in all weather. Runners vary in age from 4 to 90+ and often do not have a smartphone with them.

So that the event can run each week, runners volunteer to take on roles on an ad-hoc basis. There are two types of role; core roles, these roles are required to be filled for the event to occur, and optional roles, these are roles that do not need to be filled, but can be if people want to take them on.

Foster parkrun is part of an international group of parkruns, with other runs in and around Christchurch, New Zealand and other countries of the world. This means that runners may participate in events at multiple locations and may volunteer at multiple locations (although not on the same day).

parkrun Global provides a web-based system that allows local events to manage their volunteer rosters. In addition, events often have an off-line system to record those who wish to volunteer and the roles they want to take on. This is then manually updated in the online system. Occasionally, due to delays in updates, other people also volunteer for the same role via social media or email channels during the week. This can sometimes lead to confusion and frustration.

Foster parkrun currently uses a whiteboard for offline volunteer signups at their events.

**Foster parkrun would like to replace the whiteboard with an electronic system that allows people to sign up for volunteer roles in future weeks and also that displays the volunteers for the current week.**

More information on parkrun and Foster parkrun can be found at:

https://www.parkrun.com/

https://www.parkrun.co.nz/foster/

https://www.facebook.com/Fosterparkrun

The system should:

- Not require people to login
- Allow people to identify themselves using their barcode
- Allow people to choose the week and role they want to volunteer
- Update the online system, and remain in sync
- Show the current week, plus 3 or 4 weeks in the future
- Show the core volunteer roles
- Be readable at a distance of 1m

The system should not:

- Require people to manually enter their name or barcode number
- Be overly large or heavy (It should be able to be carried/moved by a single person)
- Require mains power (at the event)

Nice to haves:

- Show/Update the common optional roles
- Have the ability to select a future date beyond the 3-4 weeks showing
- Have the ability to select a less common optional role

Things you can assume:

- Internet connectivity is available
- An API[1] exists to lookup an athlete name from their barcode
- An API exists to update volunteer roster entries
- An API exists to get the details for current and future rosters
- Cost/Affordability is not a consideration at this stage

Core roles are:

- Run Director

[1] API: Application Programming Interface – a way to make services available for other systems to use.

First-Timers Briefing

Tail-walker

Timekeeper

Barcode Scanner

Event Day Course Check

Results Processor

Optional roles include:

Course Setup

Park-walker

Marshal

Photographer

Token Sorter

Funnel Manager

Volunteer Co-ordinator

Equipment Storage & Delivery

More information on volunteer roles can be found at:

https://support.parkrun.com/hc/en-us/articles/200566523-What-do-the-volunteers-do-

**Ideation Requirements**

Develop three idea sheets (an idea sheet is Sheet 1 of the Five Sheet Design process) each of which develops, filters and refines ideas.

One sheet should cover ideas for interaction. That is, a user selecting a role and entering their barcode.

One sheet should cover ideas for orientation and layout. The information that is displayed on screen, how the screen is orientated and the layout of information.

One sheet should cover ideas for the physical design of the system.

Each sheet should have 5 to 7 initial ideas that are then combined and refined.

Your Ideation Sheets should be at least A3 in size, and can be done digitally or on paper. However, your submission must be digital so you will need to scan [2]any paper based sheets.

## Final Concept Design Requirements

Develop at least three concepts of the whole system, incorporating ideas from your ideation sheets, using Sheets 2/3/4 of the five sheet design process to a point where you could discuss them with a client. These must include sufficient information to understand how someone would interact with the system.

Select one of your three concepts (or a new hybrid concept) to develop into a realised design (Sheet 5).

Your Concept Design Sheets should be at least A3 in size, and can be done digitally or on paper. However, your submission must be digital so you will need to scan any paper based sheets.

You can use the templates provided on the five sheet design website, or develop your own. The information required on the templates should be used as a guide, but are not strict requirements, except for the requirement to include your name and student id number on each sheet.

## Interactive Prototype

Building on your final Concept Design, develop an interactive prototype with linked wireframes using Balsamiq.

> The prototype should include a wireframe for each screen in your concept and should include interaction.

You must also include a report with your prototype that:

> Outlines the main design choices that you made for the prototype.
>
> Describes the interaction/navigation approach you developed for the system.
>
> Your report should also include information on the suggested colour scheme for the major elements within your design.

Your prototype will be a Balsamiq project with all required elements; the first screen must include your name and student number in a readable form. Submit your .bmpr project file.

Your report must have your name and student number on the first page/front cover, and must be submitted as a PDF.

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[2] Lincoln University has A3 Scanners on all printers and the School of Landscape Architecture has a large format scanner available by the upstairs kitchenette.

# Marking Guide

## Ideation Sheets (Total: 90 marks)

Each sheet will be marked out of 30, with 20 marks available for the ideas explored and 10 for the combine and refine process.

A high scoring set of ideas will have five to seven ideas captured that are different from each other and that demonstrates an exploration of the idea space.

A high scoring combine and refine process, will show clearly how ideas have been combined, and on what basis ideas have been ruled out.

A low scoring set of ideas will have few (less than five) ideas shown, and/or ideas that are broadly similar to each other. A low scoring sheet will have only narrowly explored the solution space and not followed the combine and refine process.

## Concept Design (Total: 70 marks)

Sheets 2/3/4 (20 marks per sheet)

A high scoring set of sheets will have:

A unique concept developed, drawing from previous ideas and integrating them well together. The concept will meet most of the requirements (or all).

A low scoring set of sheets will have:

Similar or the same idea explored on multiple sheets, may not include the home/default screen, or navigation. Colour will not be used or not illustrating key areas.

Sheet 5 (10 marks)

A high scoring sheet will:

Continue the exploration of an idea from sheet 2/3/4 and may combine elements of two or more sheets. Follow the criteria for Sheets 2/3/4. The idea will meet the requirements listed in the brief.

A low scoring sheet will:

Not follow the criteria, not outline a design the continues or combines sheet 2/3/4 or has substantial missing elements.

## Interactive Prototype (Total: 60 marks)

### Wireframe (40 marks)

A high scoring wireframe will include all of the required elements and build on an earlier concept design. The wireframe will consider the physical constraints and digital constraints of the design.

A low scoring wireframe will miss some required elements and won't consider some or all of the physical constrains and/or digital constraints of the design.

### Report (20 marks)

A high scoring report will be written with good attention to language and layout with content that covers the required aspects, including a discussion of the main design choices made. The report will discuss the interaction/navigation aspects of the design, including the structure of your system. The colour scheme for the system is discussed and explained.

A low scoring report will miss one or more of the aspects requested and may have issues with language and/or layout.