ITLC Timetable system

Project Process

The software development process that we have chosen for our project is the Waterfall Model.

Advantages of Waterfall Model

We have chosen this model as the requirements are well understood and unlikely to change radically during development, problems in the projects are more likely to be sorted out early on and the model is rigid; making it easier to handle.

VS Iterative Development

Iterative development did not suit our project because there is a risk that with this process, a significant amount of resources could be wasted in making changes to initial design whereas the waterfall model asks for specific deliverables at each stage of process, making sure that each part of the project is fully complete.

VS Incremental Development

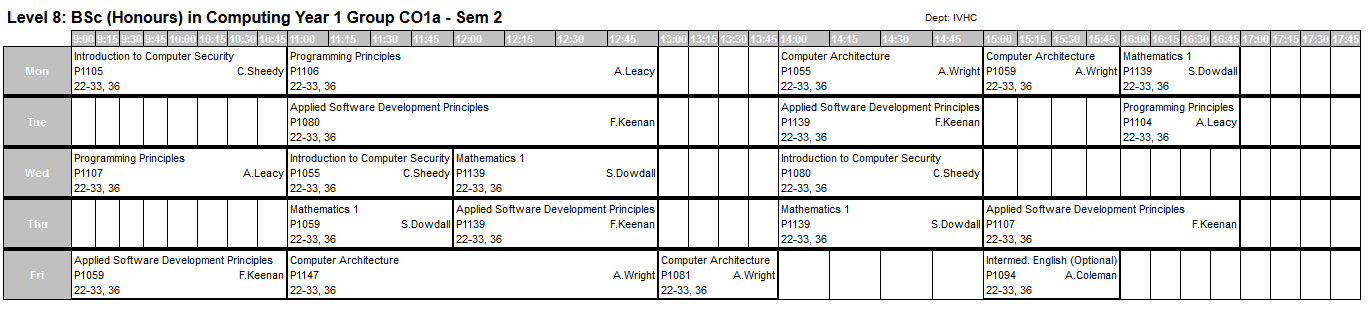
Incremental Development did not suit our project because it is not as cost-efficient as the waterfall model due to frequent software changes that would be avoided in the waterfall model and the process is not visible, making it harder to keep track of progress of the project.

Requirements Elicitation Techniques:

We used multiple techniques to create our list of requirements for the project, including analysing an existing system and interviewing someone who would be using the project.

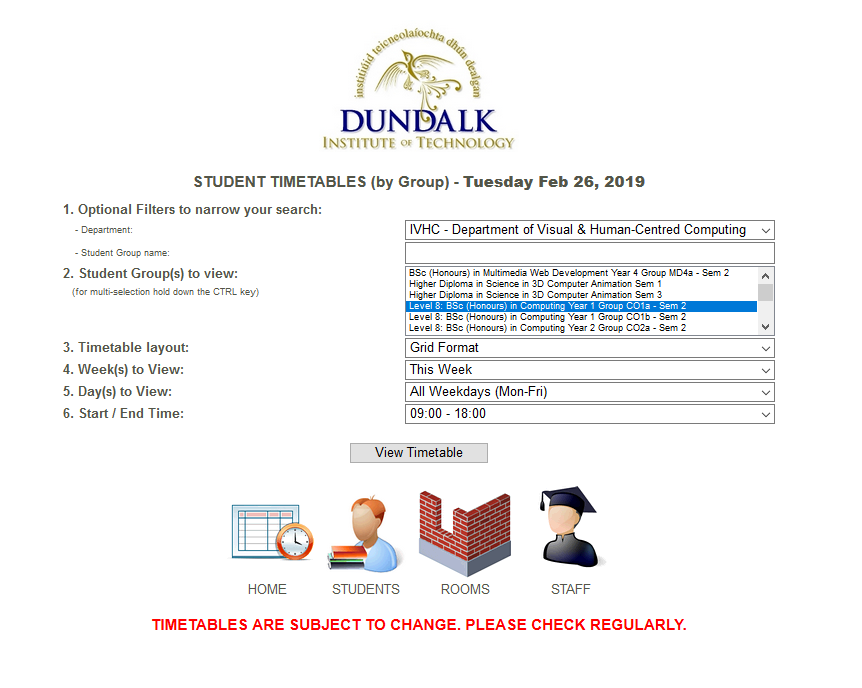
Analysis of Existing System

Example timetable:



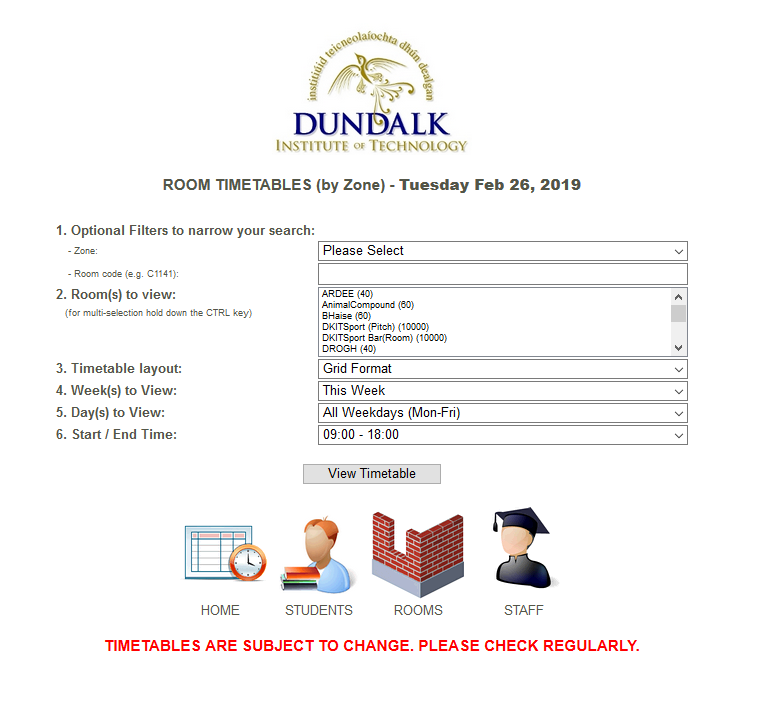
* Display timetable

Student timetable menu:



* Search timetables by student group
* Select display type (grid/list)
* Select time/date

Room timetable menu:



* Search timetables by room
* Select display type (grid/list)
* Select time/date

ITLC Timetable (sent by weekly email):

Interview

1. How do you use the current DkIT timetable system?

Check classes, check room availability

1. What do you like about it?

Flexibility, Ease of use

1. What could be improved?

Max of three timetables at a time on DkIT system, hard to organise multiple classes as an ITLC mentor

1. What features would you like to see in a timetable system for the ITLC?

Interface with DkIT / cross reference, booking system (options, times, e.g.), live updates, easily seeing currently booked classes

1. How would you use it?

Book classes during free time

Other notes:

Some students are reluctant to email to book classes, having a web-based booking system would be greatly beneficial.

Personas

Mentor

Name: James Farrell

Job Title: Mentor in ITLC

Age: 21

Education: Leaving Cert, College Student

Technology Exposure: Tech savvy, knows programming, uses social media

Hobbies: Youtube, Video Games, Music, Programming

Goals: Help other students, Run classes in ITLC

Scenarios: Find this week’s timetable, check class status, book class, contact mentors, organise classes,

Requirements

User groups

* Students
* Mentors

Functional requirements

* Show timetable
* Add lesson
* Remove lesson
* Change lesson
* Search lessons
* Request lesson
* Book classes
* Check against DkIT timetable system
* Check currently booked classes
* Notify users

Non-functional requirements