



University College Dublin  
An Coláiste Ollscoile Baile átha Cliath

# COMP3030J Software Engineering Project

## Lecture 6

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**UCD School of Computer Science**

**Ranked  1 in Ireland, according to QS World University Rankings 2017**



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# Overview

Problem-based learning (PBL)

Project Plan



## Moodle Enrolment

- <https://csmoodle.ucd.ie>  
Log in with your UCD username and password
- Find COMP3030J Software Engineering Project 2019-20
- Enrolment key: COMP3030J2020



## Problem-based learning (PBL)

“Problem-based learning (PBL) is an instructional method that challenges students to “learn to learn” by working cooperatively in groups to seek solutions to real world problems. These problems are used to engage students’ curiosity and initiate learning of the subject matter. PBL prepares students to think critically and analytically, and to find and use appropriate learning resources” (Duch, 1995).



## Problem-based learning (PBL)

Problem-based learning has several unique strengths as a learning method.

- PBL engages students in active learning
- PBL compels students to take responsibility for their learning
- PBL develops and supports problem-solving skills
- PBL stimulates self-directed learning.



## Project Stages

“Problem-based learning is a development and instructional approach built around an ill-structured problem which is a mess and complex in nature; requires inquiry, information-gathering, and reflection; is changing and tentative; and has no simple, fixed, formulaic, ‘right’ solution” (Finkle & Torp, 1995).



## The Problem

1. See “Problem Statement 2020.pdf” on the moodle (under week 1).
2. You probably can’t review that enough!



## Main Concerns (1)

Healing Paws' main concerns are the following:

- Ability for customers to make appointments for their pets. There are two appointment types: emergency and standard. These will need to be handled by Healing Paws employees accordingly. It should be possible for one customer to make appointments for multiple pets if possible.
- Ability for customers to see the status of their pets for serious cases when required. For instance, surgery date confirmed, surgery complete, pet ready for release, etc.
- ...





## Main Concerns (2)

Healing Paws' main concerns are the following:

- Ability for employees to organize, prioritize and keep track of pets in the system
- Ability for customers to ask questions and for employees to answer them.
- The system should have two portals – one for customers and one for employees.



## Solution

- For your solution, the above concerns need to be addressed before any additional functionality is added.
- Note, additional functionality is **not required**. The last two slides is all that is required.



## The Solution

Break the problem down. What do you need to do?

- Customers need to make appointments (emergency and standard)
- Customers need to see status
- Customers need to ask questions and employees need to answer them
- Employees need to organise, prioritise and keep track of appointments
- This should be done with two portals, customer and employee



## The Solution - Technical

- Cloud based & accessible on the web
- Secure - your documentation and presentation should highlight steps taken
- Reliable - your documentation and presentation should highlight steps taken
- Available in Chinese and English
- Work on mobile and PC platforms

**It is up to you to decide how to make this happen!** For example: *Q: Do you need to develop a mobile app? A: You tell us! If you think that is best, yes. If you think that viewing a webpage on a mobile browser is ok, fine!*  
**But tell us (documentation/presentation) what you decided and why!**



## Plan for the rest of the Semester

- Week 6 (this week)
  1. Brett and Catherine will provide feedback on pitches
- Week 7 - Continue developing your solution
- Week 8 - Submit demonstration video (5 min max). Systems will not be complete - this is OK. Deadline Friday, April 17th, Midnight Irish time.
- Week 9 - Brett and Catherine will provide feedback on demonstration video
- Week 10 - Brett and Catherine will have live QA session to prepare for project completion and submissions - details to be announced



## Plan for the rest of the Semester

- Week 11 – Submit first draft of System and User documentation
  - These are two separate documents
  - The System document describes the overall system, the solution, the design, the plan, the process, teamwork, etc.
  - The User document describes how a user can use the system
  - Users are either customers or employees



## Plan for the rest of the Semester

- Week 12 – User testing. Your group will be reviewed by two other groups
- The other groups will use your system and write a one page report on their findings
- They will not only try to break your system, but point out its strengths and weaknesses
- User and system documents will also be used in Peer Review
- The point of this is two-fold
  - To make your project better
  - To develop your analytical and communications skills



## Plan for the rest of the Semester

- We will be looking for your project to improve, and for the reports you write to be quality, insightful, and useful
- In other words we will be looking at who is writing reports, and the reports. You will be looking at the content of the reports and making adjustments and improvements based on this
- ALSO. This is not a time to steal ideas (or worry about yours being stolen)
- You are not allowed at this point to add new features – Only to make the existing features better





## Plan for the rest of the Semester

- Week 13 – Fix problems that were identified during testing
- Update documentation



## Plan for the rest of the Semester

- Weeks 14 and 15
- Work on final documentation and presentation
- Deadline for documentation and presentation submission – Friday Week 15



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## Project Plan

Any questions?



## Uploads to Moodle

- For all uploads name them Group\_number\_name.pdf