

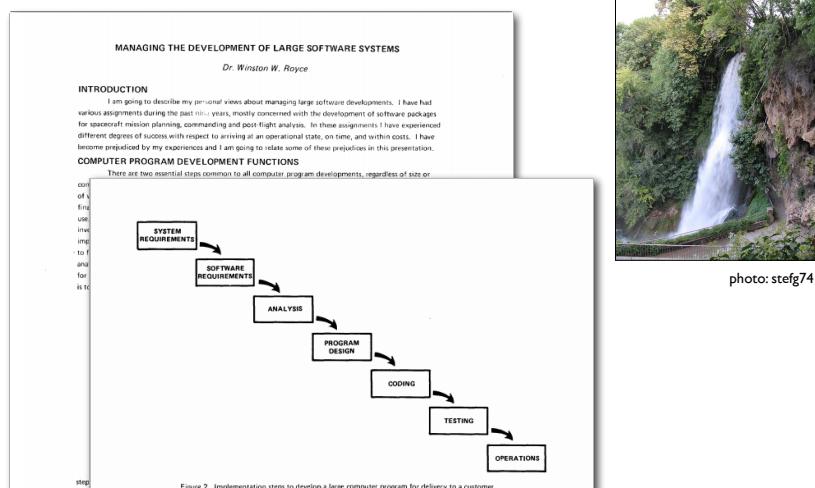
302

Software Engineering Practice

Dr Robert Chatley - rbc@imperial.ac.uk



Waterfall Development



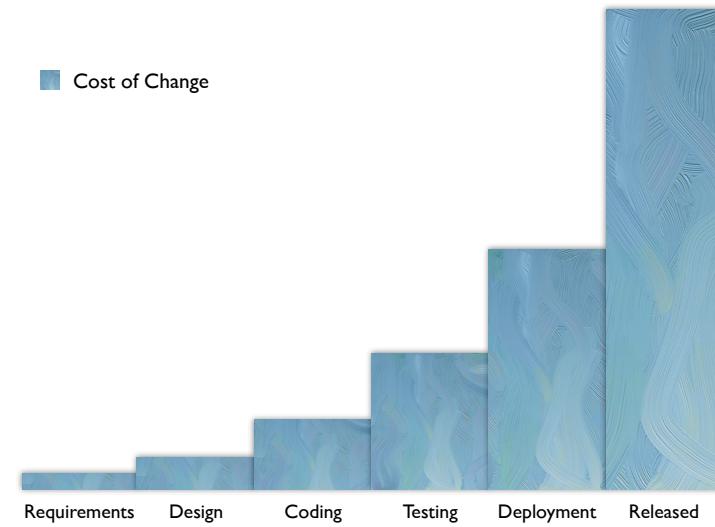
302

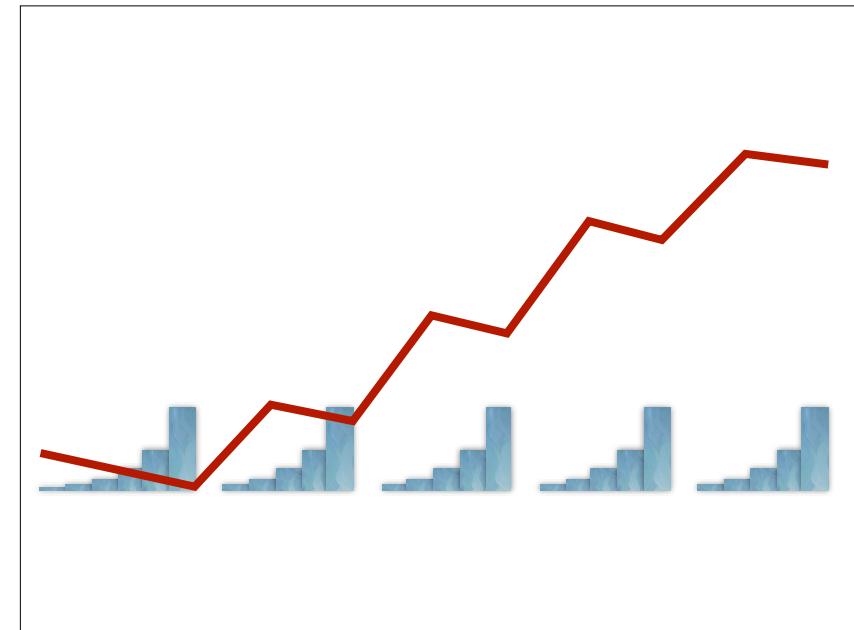
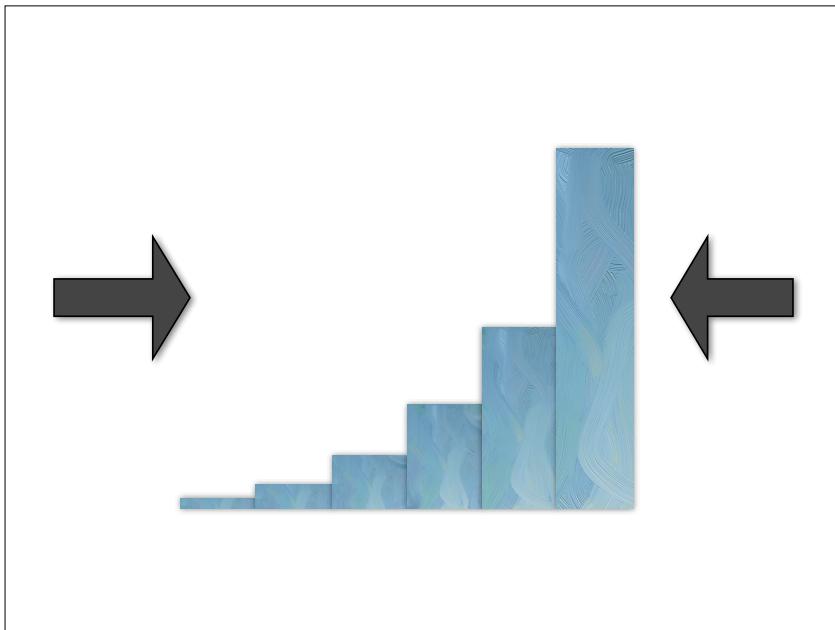
How to do well in your Software Engineering Group Projects

Dr Robert Chatley - rbc@imperial.ac.uk

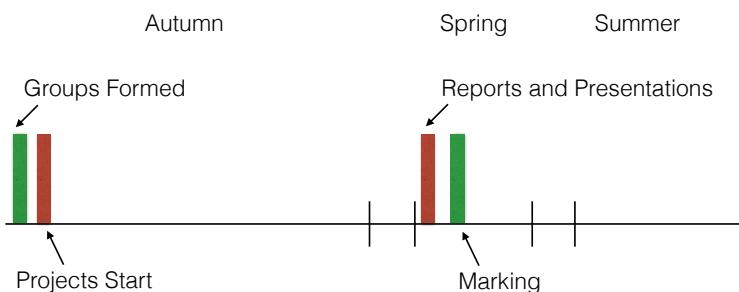


Cost of Change

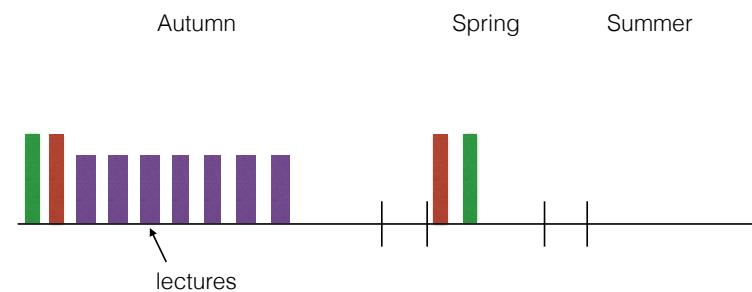




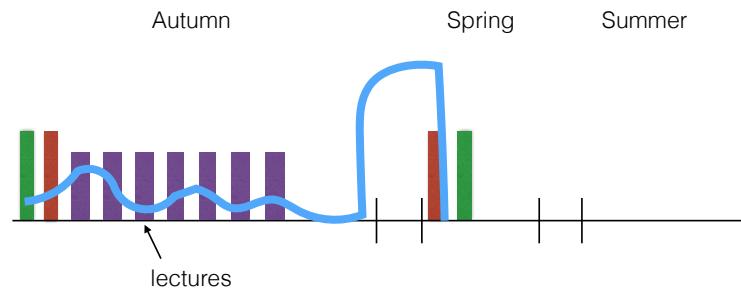
Schedule For Projects



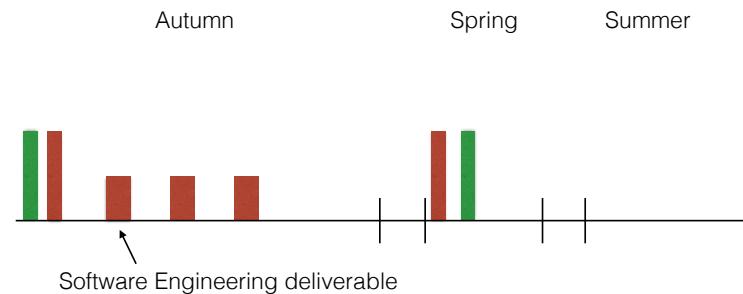
Schedule For Projects



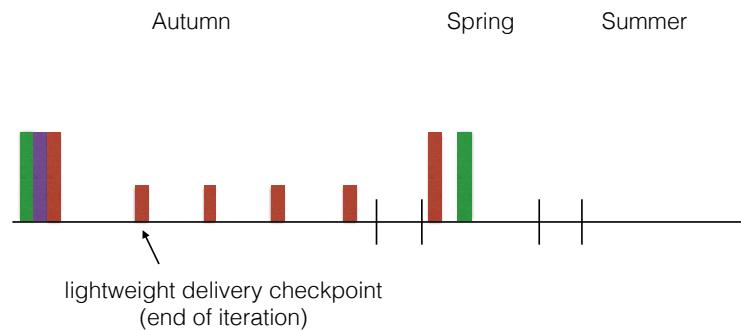
Schedule For Projects



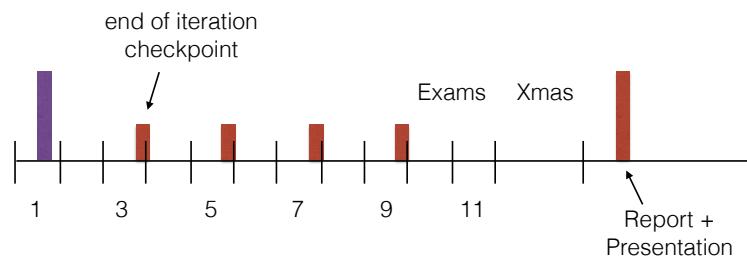
Last Year...



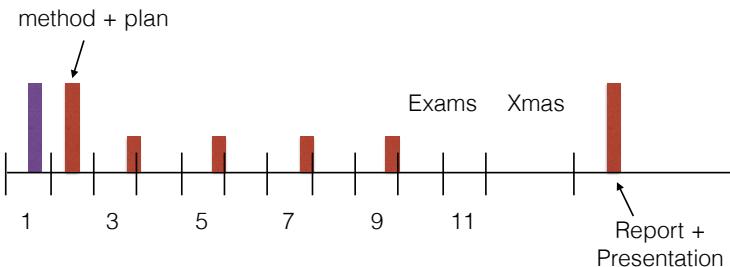
This Year...



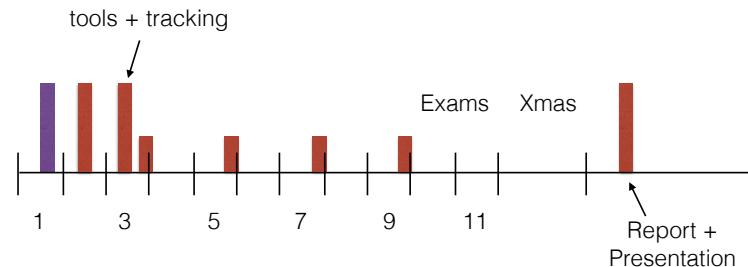
This Year...



This Year...

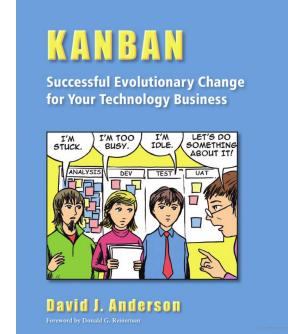


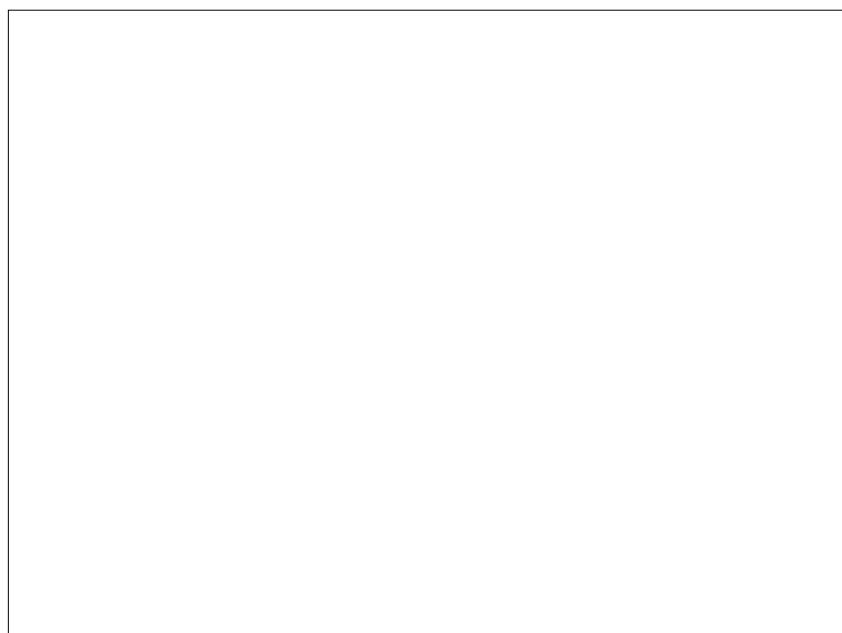
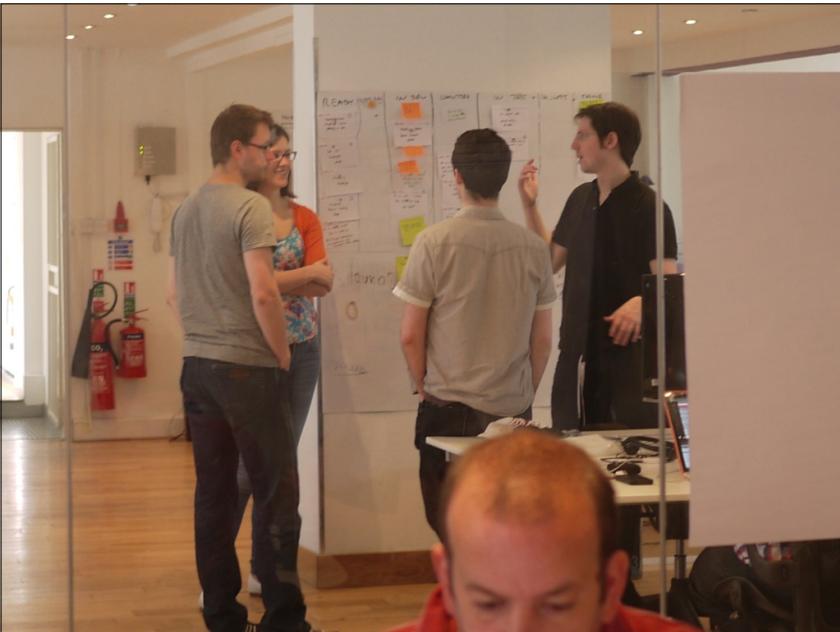
This Year...



302

Methods





302

Plans



User Stories

As a patient,
I want my records kept private
so that only I can see them.



User Stories

As a user,
I want to register
so that I can log in.

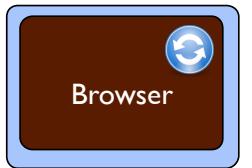
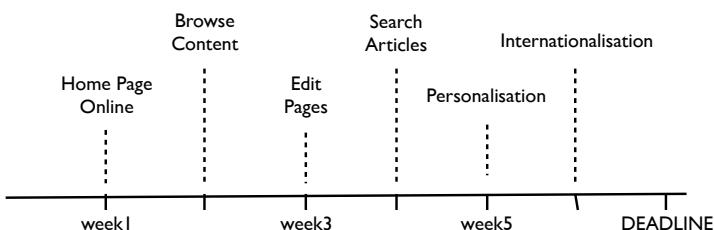




Iteration Plans

ToDo	In Progress	Done
3		
1		
8		
5		

Release Plans



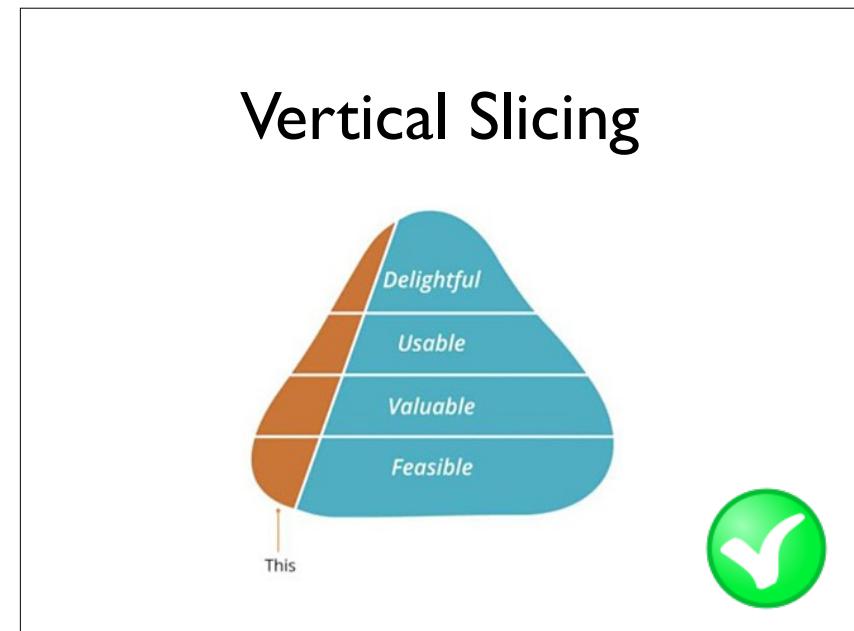
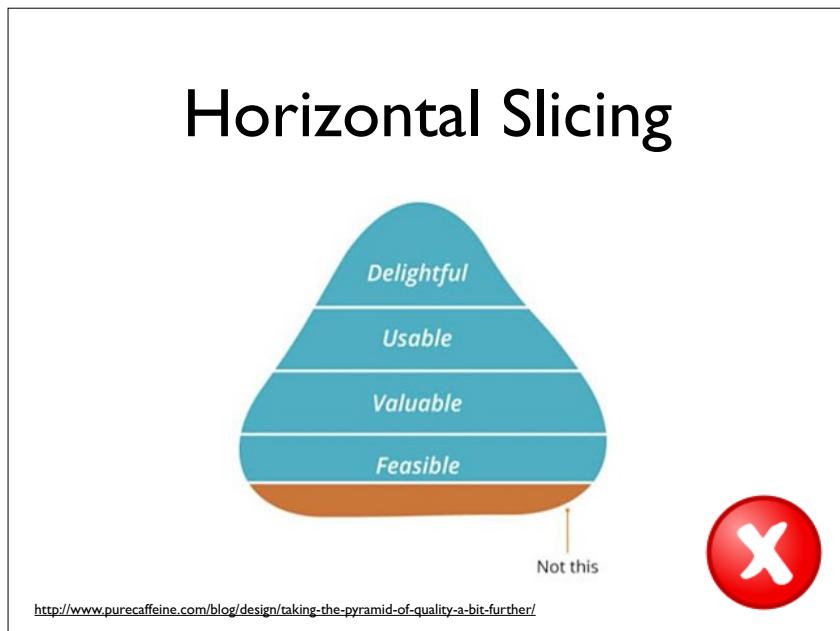
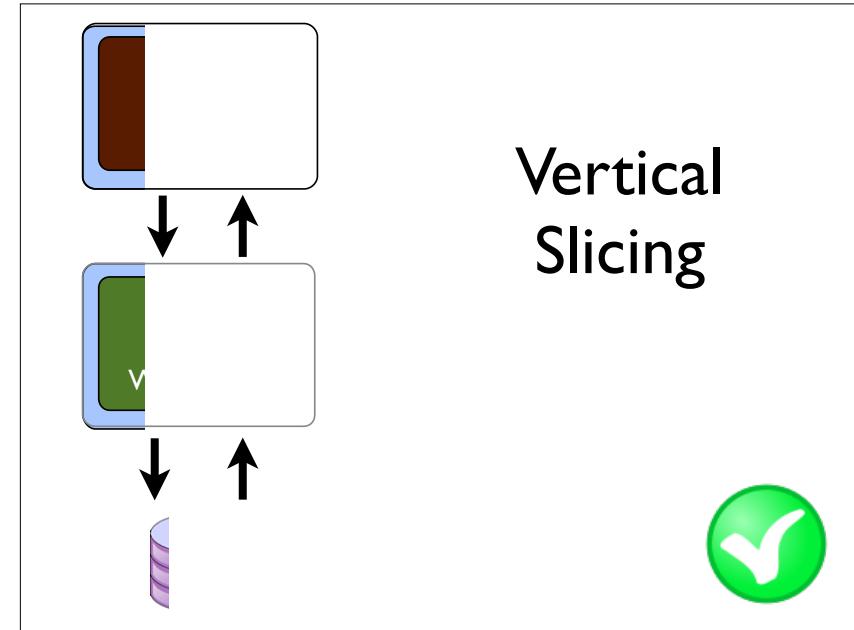
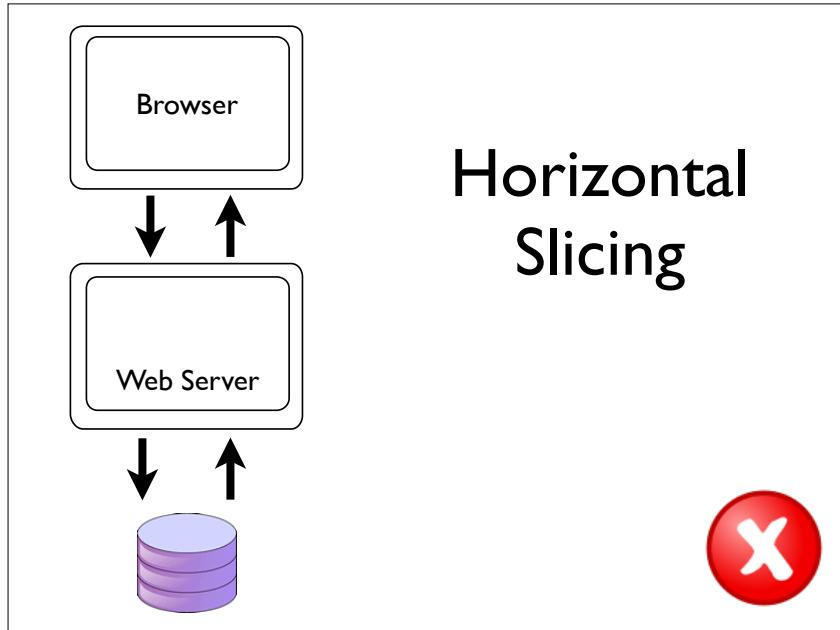
e.g. JavaScript



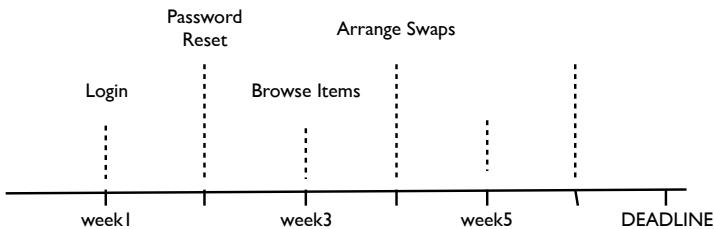
e.g. Java



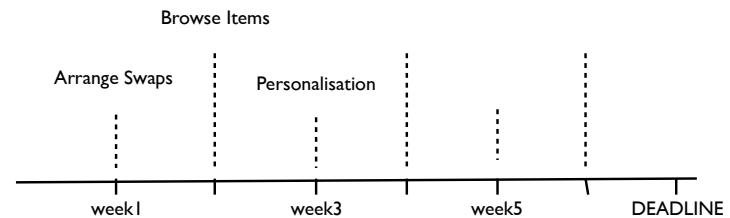
e.g. SQL



Prioritisation



Prioritisation



302

Tools



GitLab

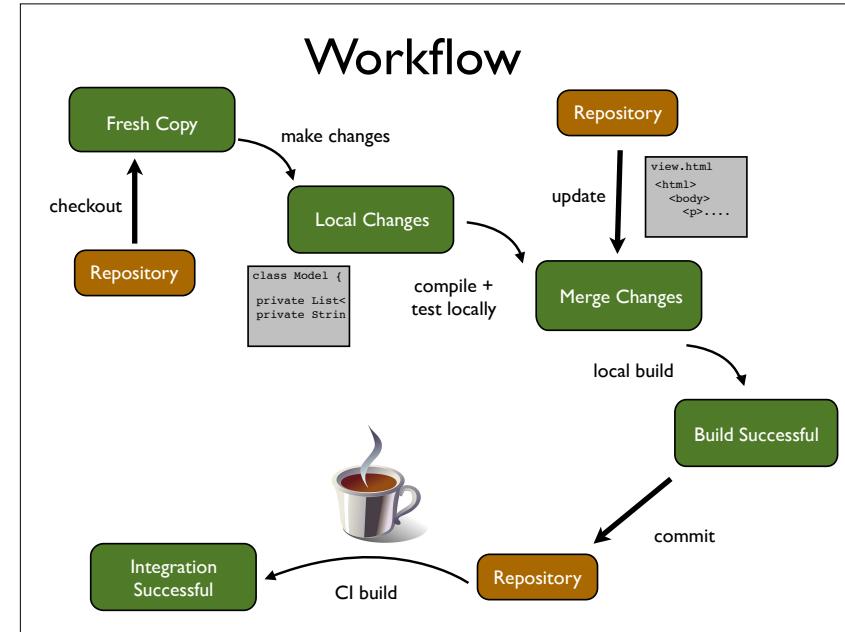
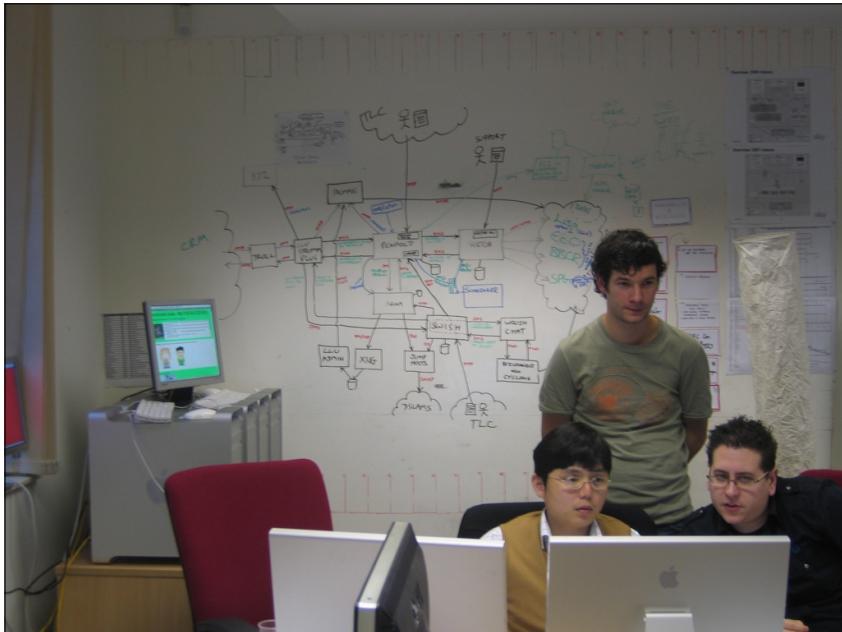
The screenshot shows the GitLab interface with the URL <https://gitlab.doc.ic.ac.uk/220/lab6-skeleton/commits/master>. The sidebar on the left includes links for Go to group, Project, Activity, Files, Commits (which is selected), Graphs, Milestones, Issues (0), Merge Requests (0), Members, Labels, and Wiki. The main content area displays the 'Commits' tab for the 'master' branch of the 'lab6-skeleton' project. A single commit is listed: 'Initial files for exercise.' by Robert Chatley on 16 Nov, 2015, with commit ID 09dc8346.

Version Control



**“The first thing you
should be told when
you start a new job...”**

```
public class CalculatorTest {  
  
    @Test  
    public void canAddTwoNumbers() {  
        Calculator calc = new Calculator();  
        int result = calc.add(1, 2);  
        assertEquals(3, result);  
    }  
  
}
```



Continuous Integration Server

All	Software	Name	Last Success	Last Failure	Last Duration
	S	build-chesbi	5 days 22 hr (#6)	9 days 14 hr (#5)	4 min 49 sec
	W	build-cl	3 days 1 hr (#12)	19 days (#10)	1 min 55 sec
		build-fbtk	5 days 22 hr (#2)	15 days (#5)	2 min 2 sec
		build-fypo	3 days 9 hr (#7)	7 days 5 hr (#5)	2 min 22 sec
		build-gaz	1 day 0 hr (#2)	1 day 0 hr (#2)	26 min
		build-go	4 hr 55 min (#178)	N/A	6 min 48 sec
		build-go-taxon	1 mo 3 days (#106)	44 min (#243)	3 min 40 sec
		build-go-xp-chesbi	4 hr 48 min (#115)	N/A	2 min 21 sec
		build-mo	N/A	14 hr (#68)	4 min 1 sec

Continuous Integration Server

TeamCity Build Configuration

Created by Vadim Rutkevich, last modified just a moment ago

#	Results	Changes	Started	Duration	Agent
#snapshot-8	Tests passed: 155	dmitry neverov (1) ↗	02 Jul 14 19:51	6m:28s	win2008-v8-i-adbed586
#snapshot-7	Tests passed: 155	dmitry neverov (1) ↗	18 Jun 14 00:02	4m:52s	win2008-v8-i-b0e7319b
#snapshot-6	Tests passed: 155	dmitry neverov (1) ↗	26 May 14 17:37	3m:39s	win2008-v8-i-7c48c72f
#snapshot-5	Tests passed: 155	dmitry neverov dmitry.neverov@gmail.com>	2008-v8-i-3841f56b		
#snapshot-4	Tests passed: 155	TW-36403 strip trailing whitespaces in .hsub	2008-v8-i-ac5faaff		
#snapshot-3	Tests failed: 1, passed: 153	dmitry neverov (1) ↗	30 Apr 14 21:13	4m:06s	win-v7-m-i-e9c613b9
#snapshot-2	Tests passed: 154	dmitry neverov (1) ↗	30 Apr 14 13:50	4m:58s	win2008-v8-i-0b36fc5b
#snapshot-1	Tests passed: 153	No changes	17 Apr 14 21:18	4m:21s	win2008-v8-i-7f1b042e

Push-Button Release



Tracking

The image shows a digital Kanban-style tracking board with four columns: Backlog, Planned, Doing, and Done. Each column contains several tasks with descriptions and user icons.

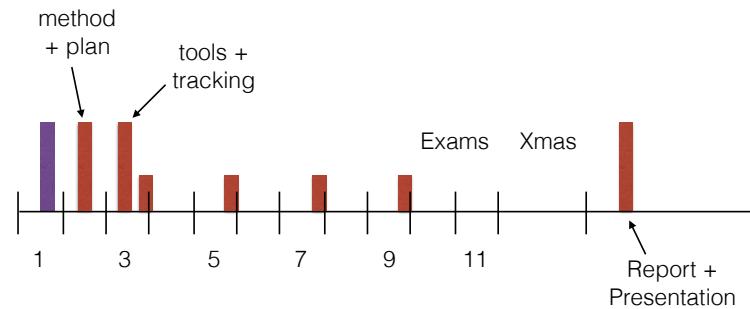
- Backlog:**
 - WEBSITE - Improve conversion rate on the website
 - TIMELINE CREATION - Being able to add text in bold, italic and underline as a teacher and student
 - TIMELINE CREATION - Being able to add lists as a teacher and student
 - TIMELINE CREATION - Being able to add hyperlinks as a teacher and student
 - UPDATE - Upgrade to Ember 2.0
 - EXPLORE - Explore section
 - WEBSITE - Open links on a timeline embed in a new window
 - TIMELINE - Sharing student's timelines with community
 - NOTIFICATIONS - Make error notifications appear in the center of the screen and stay until user addresses the issue (more)
- Planned:**
 - REFACTORING - Use code style for Javascript (<https://github.com/dockyard/ember-suave>)
 - REFACTORING - Move to Pundit for authorization
 - WEBSITE - Sort featured timelines by `featured_at` field
 - EMAIL - Have an unsubscribe for the emails we send
- Doing:**
 - TIMELINE - Being able to create paragraphs as a teacher and student
 - PAYWALL - Email list of teachers to Clare that are close to the limit
 - WEBSITE - Change copy of Pricing page
 - UPDATE - Finish 1.13 upgrade
- Done:**
 - BUG (#90) - SCHOOL CLASS - Sorting of student names is not case insensitive
 - PAYWALL - Send email to teacher when he has only 25 student timelines left
 - PAYWALL - Teacher cannot view student timelines after 100
 - EMAIL - Put "Explore, Create, Engage."

Tracking

The image shows a Jira Kanban board with four columns: Backlog, In Progress, In Review, and Done. The In Progress column has a blue background, while the others have green backgrounds.

- Backlog:**
 - ANEROS-61 The bird is flying way too high!
 - ANEROS-43 AngryTestTask
 - ANEROS-43 I'd like to see this thing!
 - ANEROS-44 Background glitches
 - ANEROS-39 Develop this map
 - ANEROS-42 Broken event
 - ANEROS-41 develop all sounds
 - ANEROS-40 Create all statics for this map
 - ANEROS-55 test
 - ANEROS-55 Support Checks Spatial
- In Progress:**
 - ANEROS-57 User interface in GI master
 - ANEROS-45 add more sound effect
 - ANEROS-227 implement button
 - ANEROS-228 fix the shape
 - ANEROS-48 Change the shape
 - ANEROS-2 Create CSS
- In Review:**
 - ANEROS-63 Pro Level
 - ANEROS-64 Scoring math incorrect
 - ANEROS-15 Next flight path does not take into account gravitational pull of moon
 - ANEROS-61 Fix the limit
 - ANEROS-149 One jets
 - ANEROS-149 One jets 2
- Done:**
 - ANEROS-4 Fix up the white pixels on the bug images
 - ANEROS-66 test header

Things to do...



Material Online

The screenshot shows a web browser displaying a course page titled "302 - Software Engineering". The page content includes a brief introduction about the development of software products, mentioning state-of-the-art techniques for producing software co-operatively, reliably and on schedule. It covers various Agile methods such as Scrum, Kanban, and Extreme Programming, along with links to their respective PDF documents. There is also a section on Estimation and Planning.

<https://www.doc.ic.ac.uk/~rbc/302/course/>

Office Hours



Monday 9:30 - 11:30

Tuesday 9:30 - 11:30

Friday 9:30 - 11:30

Book an Appointment online
see <https://www.doc.ic.ac.uk/~rbc/302/>



Any Questions?

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 @rchatley

