

## Project Issues and Project Priorities

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## Scaling of marks

- Project marks are tightly bunched
  - Tend to be high because of checklist nature of the marking scheme
  - Not many fail this unit doing no work can achieve this! but it is hard to obtain an HD
- New University policy of no more than 50% D+HD
  - Change of ECM Faculty policy
- Scaling may be needed.
  - Leave essay marks generally unscaled
  - Sometimes scale project downwards, if required

## The Deliverables: A

- Deliverable A is worth 5% but is important (low weight as teams are settling in)
  - Do as much planning and estimation as you can
- It is a Requirements Analysis Document (RAD) have a look at the unit website for specifics
- No client sign-off (though they need to be given a copy)

## The Deliverables: B

- Deliverable B (20%) takes less time than you think
- A project plan use a project planning tool, e.g. *MS Project* in MS Office or *GanttProject* (open source).
- Skills Audit and Risk Analysis
- Client sign off for RAD plus any prototypes.
- The definition of Use Cases, etc (based on same template as deliverable A)
- Acceptance Tests, based on the <u>Test Manual template</u> by Bruegge & Dutoit.

#### The Deliverables: C

- C (40%) Will take more time than you expect
  - Plan for this
  - Make sure the process is followed
  - Allow work on deliverables to overlap
- Track progress
- Cut what you deliver in C to fit the time available
  - Value versus difficulty estimate important for this
- Deadline for electronic submission is firm

#### The Deliverables: D

- Worth 10%
- Give a short account of your greatest achievements
- Explain what went wrong and why. Suggest improvements to your software engineering process.
- Will be assessed by people attending the talk.

#### The Deliverables: D

- Summarise your hours spent on the project
  - comparing estimated with actual times.
  - Give the total hours spent on the project as a whole. (This can be an elaboration and review of the time analysis performed in Deliverable C.)
- You are also required to review the generic skills practiced or learnt in your project.

## **Bug/Issue Tracking/Version Control**

- These help you in your project
- Use bug/issue tracking, e.g. Trac (bug tracking) or other bug tracking/reporting
- Search existing bug reports
  - Start using for Deliverable A
  - Use Product ID, of the form CITS3200T (group T)
- Use CVS or Subversion for Del C and maybe Del B
  - See instructions on web (under resources)
- Some Groups used Github very successfully over the past couple of years. Trello, Bitbucket recent additions.

## Other Useful Apps

- Google Docs may be useful for group communication, but is no substitute for CVS or similar version control
  - Some groups have been using Facebook for communication. Also Slack. Better than email as everyone has trace of conversations
  - General project/group management online tools, e.g. Trello, Basecamp
- Sikuli (<a href="http://sikuli.org/">http://sikuli.org/</a>) looks like a very interesting way of testing GUIs

## **Timesheet**

- Aims to help you keep track of time and effort spent and remaining
- More about this in a minute

# Determining Value using the hundred-dollar test



## What is it?

- A quick and easy method of getting your client to indicate the importance they place on a requirement. We use money as its something most people are used to thinking about!
- This will show you the relative values of each requirement i.e. you can see how much more important one requirement is to another so you will know where your time is best spent!

#### How to use it

- Develop the list of your requirements with the client
- Go back to the client with the final list of requirements
- Tell them that they have \$100 to divide over the requirements.
  - There is no point distributing the money evenly!
- The way that they spend the \$100 indicates the priority that they put on each requirement

## How to use it – An Example

Requirement	Value	
Authentication System	\$20	
Database	\$40	
GUI	\$20	
Web Access	\$15	
Command line access	\$5	

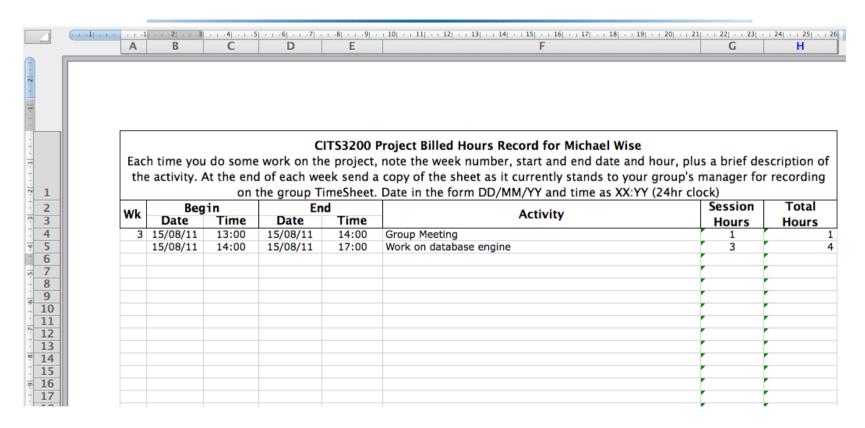
## Why we use it

In your project there will be more requirements than it is possible for you to meet with your time constraints

The \$100 test shows us:

- where our time is best spent
- how much of the value of the total project we are meeting by fulfilling one requirement

## **Booked Hours Spreadsheet**



- Booked Hours Spreadsheets are to be completed by **each member of the Group** showing what you did that week, both General and Requirements-related tasks. Just add to the next line and resubmit
- Please don't mess with the formatting; not a robust document

## Handling the Timesheet

- MS Excel spreadsheet
- Submitted by Group Manager every Friday starting Week 2, based on Booked Hours spreadsheet sent to him/her by Group Members
- Read the Instructions on the worksheet
- Your estimates will change over time this is a good thing...it shows you are monitoring your project and constantly reevaluating!

## TimeSheet - General Tasks

- List of general tasks are there already.
- You can add to it, but don't remove them if you add a task fill in the week added column
- Fill in the total hours your group has allocated to the project
- Fill in the team member responsible
- Each week fill in
  - the Actual time you spend on each task (A)
  - the time you estimate is remaining. (E)
  - If you complete a task put the week number in the completed column

#### Fill in the actual time spent If you compete a task fill in the week Fill in the estimated time remaining Total Hours our group has allocated = Task ed time remaining, A=Actual time spent this week) Week Team Members k 5 week 6 week 7 week 8 week 9 Completed week 10 week 11 Task Name Responsible (Week Number) Added Α A Ε Α F Learning Techniques and tasks (eg bugzilla and CVS) Research and Investigation Requirements Gathering Requirements Analysis System Design Test Design Documentation 0 Project Meeting and Communication Review Fill in total time allocated Fill in the person responsible; be specific Fill in the week added Add tasks here

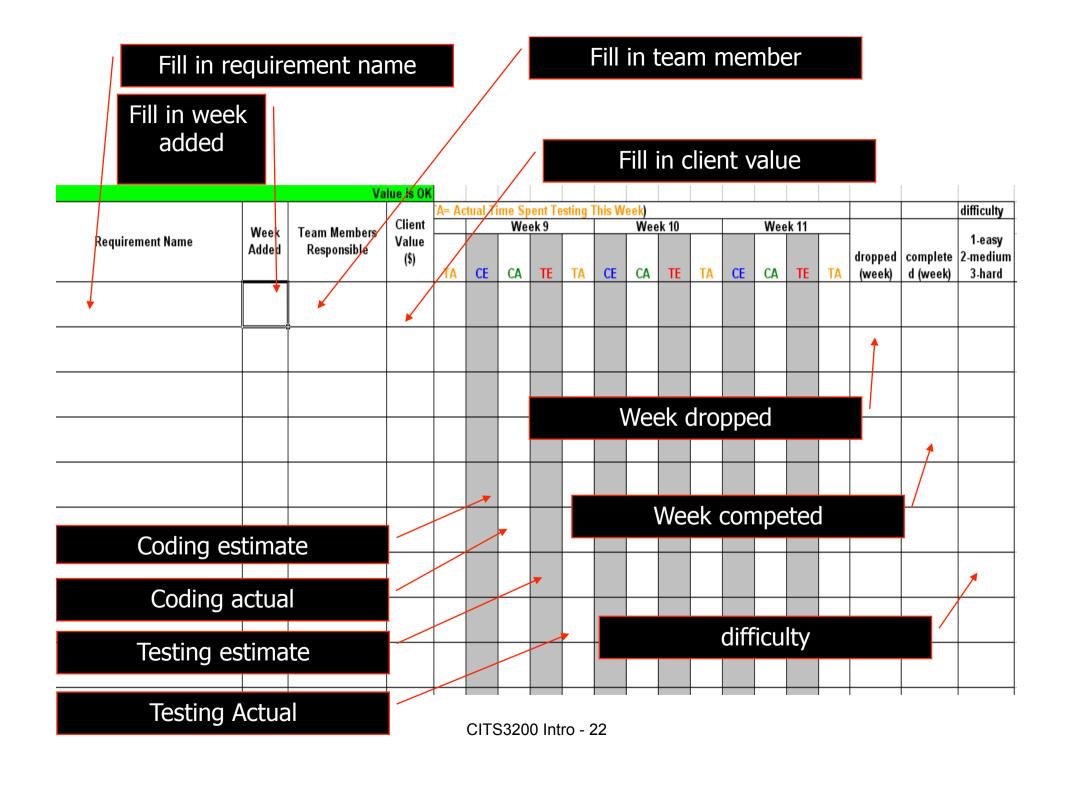
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## Requirements

- Add the requirements in when you know them, it should be finished when you submit deliverable A
  - Put in the name of the requirement
  - The week added
  - Who is responsible
  - The client value
  - How difficult you think it is (easy, medium, hard)
- Adding requirements after Del B suggest scope creep.

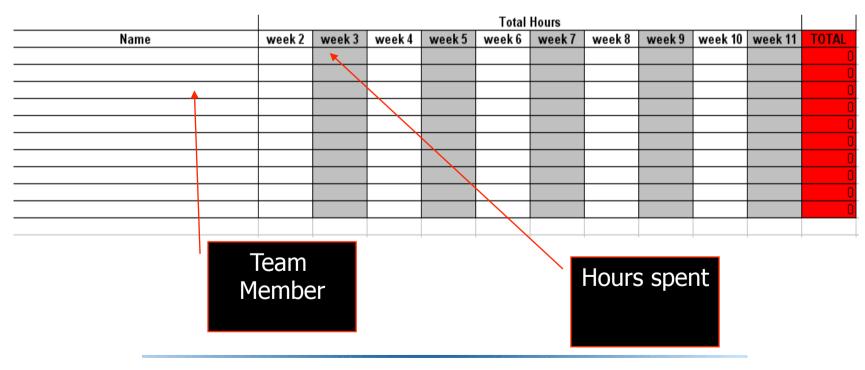
## Requirements

- Each week fill in
  - the Actual time you spend on coding (CA)
  - The Estimated time you have left on coding (CE)
  - The Actual time you spend testing (TA)
  - The Estimated time you have left on testing (TE)
  - If you complete a requirement put the week number in the completed column
  - If you drop the requirement put the week number in the dropped column



## Per Person

- Add in each team member
- Record how many hours they spent each week (Based on Bookable Hours)



## Results

- Don't change any existing formulas on this sheet but feel free to add anything that you think will help you
- Total Time Spent shows
  - How your time differs to the recommended 60hrs
  - How your time differs to the time you agreed to spend
  - How your time differs to the estimates you gave when deliverables A and B were due
- Requirements
  - Number of requirements met
  - The value of the requirements met
  - The number scrubbed and the value scrubbed
- Tasks
  - The number of tasks remaining and the number completed

	U		
TOTAL TIME SPENT			
Suggested Total Time to be spent by group =	0	(Computed as 60 hours per person)	
Actual Total Time Spent By Group =	0		
Hours Remaining From Suggested Time Budget =	0	within budget	
Hours Remaining From Your Groups Chosen Time Budget =	0	within budget	
Initial Time Estimate compared to Actual Time Spent =	0	within estimate	(Taken from week 4)
Initial Time Estimate compared to Actual Time Spent =	0	within estimate	(Taken from week 8)
REQUIREMENTS			
Number of Requirements Met =	0		
Value of Requirements Met =	0	less than 60% met	
Number of Requirements Scrubbed =	0		
Value of Requirements Scrubbed =	0	less than 40% scrubbed	
TASKS			
Number of Tasks Completed =	0		
Number of Tasks Remaining =	9		
4			

## Minutes

- Minutes are to be kept of all group meetings
  - Mentor meetings have also to be minuted
- Responsibility of Group Leader, but can be delegated to another Group Member
- **NOTE**: Marks will be lost for each thing (Minutes, TimeSheet, Zip/Gzip file of Booked Hours spreadsheets) not submitted on time