



THE UNIVERSITY OF  
MELBOURNE

# SWEN90016

## Software Processes & Project Management

Introduction  
Project Initiation  
Medic Case Study  
Assignment 1

## Introduction:

- Name
- Programme being studied
- Work Experience? (If yes, what type of industry experience?)
- One hobby

Tutor:  
Email:

@unimelb.edu.au

Tutorial format:

Active participation.

Group discussion

Think critically about content.



The tutors do not know how to help  
unless you communicate with us, so ...  
ask questions.

<http://accelerated-learning.co.za/wp-content/>

When poll is active, respond at **PollEv.com/estherrotimi653**

Text **ESTHERROTIMI653** to **22333** once to join

## What is the first project management process?

Planning

Execution

Initialization

Monitor and Control

Understand the initialization phase by doing an activity for each phase

1. Business needs analysis
2. Analyse constraints
3. Stakeholder analysis

The first Project Management **process**: initialization

analyze Case Study  
(business needs)

analyze constraints  
(scope, time, cost)

develop Business Case  
(cost verses benefit)

not part of  
this course

develop Project Charter  
(stakeholder analysis)

**Activity:** You want to cycle from Melbourne to Sydney.  
Groups of 4

analyze Case Study  
(business needs)

- What are the challenges for such a project?
- What risks would this project need to consider?



# Project Characteristics

**Project:** You want to cycle from Melbourne to Sydney.

**Goal:** – Create a fun & exciting adventure

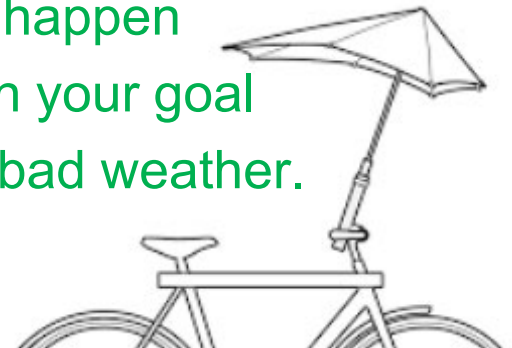
**Challenge:** It is hard to travel this long distance with a bicycle

- This characteristic is known to exist.
- The solution requires resources, (fitness).



**Risk:** The weather may be very bad (cold or rain)

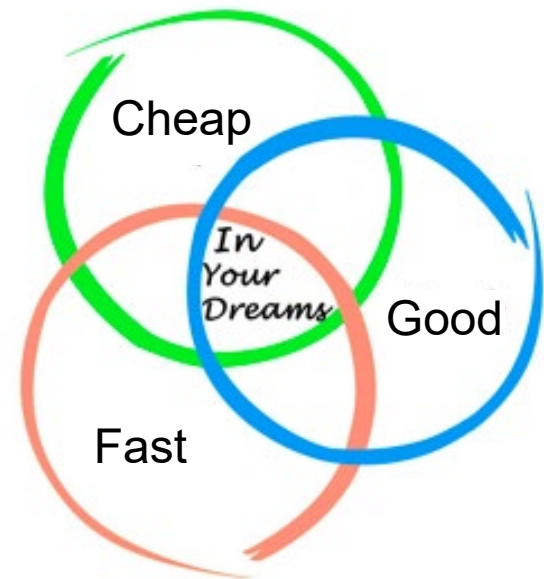
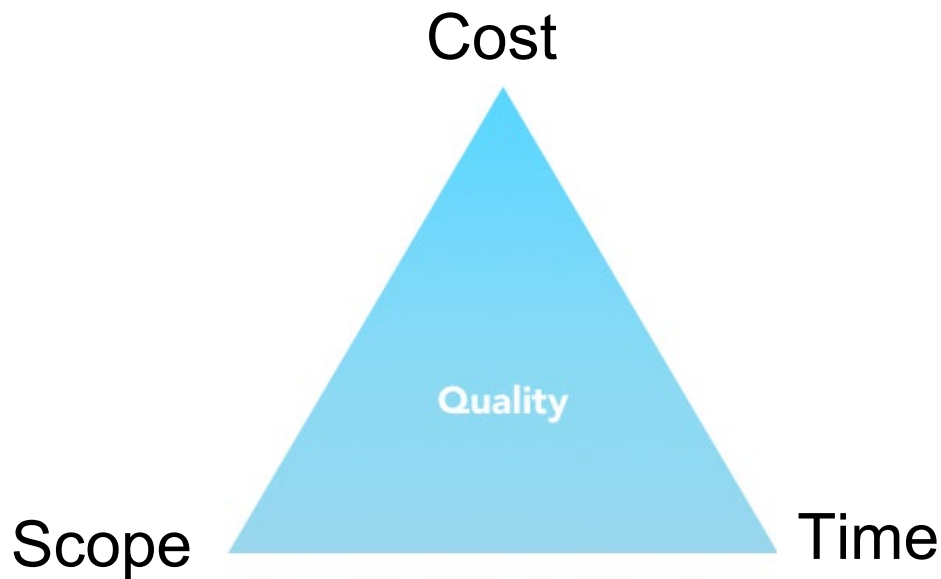
- This possible future event may or may not happen
- Bad weather may cause you to fail to reach your goal
- Better plan a mitigation strategy to control bad weather.





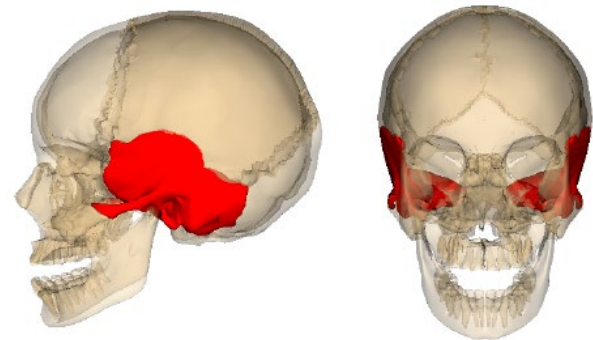
Know your project's  
*triple constraint*

analyze constraints  
(scope, time, cost)



## Case Study 1 -Virtual Temporal Bone Surgery

- Who has read the Case Study?
- Do you know what Person Days are?
- Divide the Case Study into components



What kind of system is this?

- What are the project's characteristics?

Discuss and plan and question

Get into groups of 4-5 people.

Fill in the exercise sheet.

Person Days clues:

Project duration is 2 university semesters = 30 weeks

4<sup>th</sup> year SWEN students take 4 subjects a semester =  $\frac{1}{4}$  time allocation

IT support developers at \$50,000 pa = fractional time allocation

Cost clues:

experienced developers at \$100,000 pa

experienced surgeons at \$200,000 pa

junior developers (4<sup>th</sup> year SWEN students) at zero cost

junior surgeon users at zero cost

IT support developers at \$50,000 pa

# Case Study Exercise

Item	Value	Reason
on Size		
on Days		
ect Goal		
acteristics		
ible Risks		

VR simulation enacting real-world tasks, integrate multiple hardware devices, good graphics & embedded software, QA focus

## Know your project's *risks*

- If this project was to fail, what do you think would be the reason?
- What harm minimization strategies would you plan to use?



### Risks

1. Unexpected behavior of new hardware
2. Low technical ICT skills of users
3. Skill set of developers in C++
4. Compare availability of Graphical libraries in C++ / Java
5. Algorithmic complexity

## Know your stakeholders

### *Who is invested?*

- Prioritize and understand your stakeholders
- Someone's position on the grid shows you the actions you have to take with them
- How do they feel about the project

develop Project Charter  
(stakeholder analysis)

Who is the project champion?



## *What should you tell them?*



Determine how you communicate:

You are the Project Manager and the project is experiencing delays as one of the components is not working.

Discuss how you will inform each of the stakeholders.

Marks: 20%

What: Figure out an appropriate SDLC for a given Case Study

How to do well:

1. Critical analysis of Case Study's characteristics and risks
2. Critical analysis of more than one SDLC's processes
3. Balance the pros and cons and justify your choice of SDLC

Any Questions?

Please read Language Research Case Study for next tutorial



# Thank You!