THE UNIVERSITY OF MELBOURNE

SWEN90016

Software Processes & Project Management

Introduction

Project Initiation

Medic Case Study

Assignment 1

2021 – Semester 1

Tutorial 1

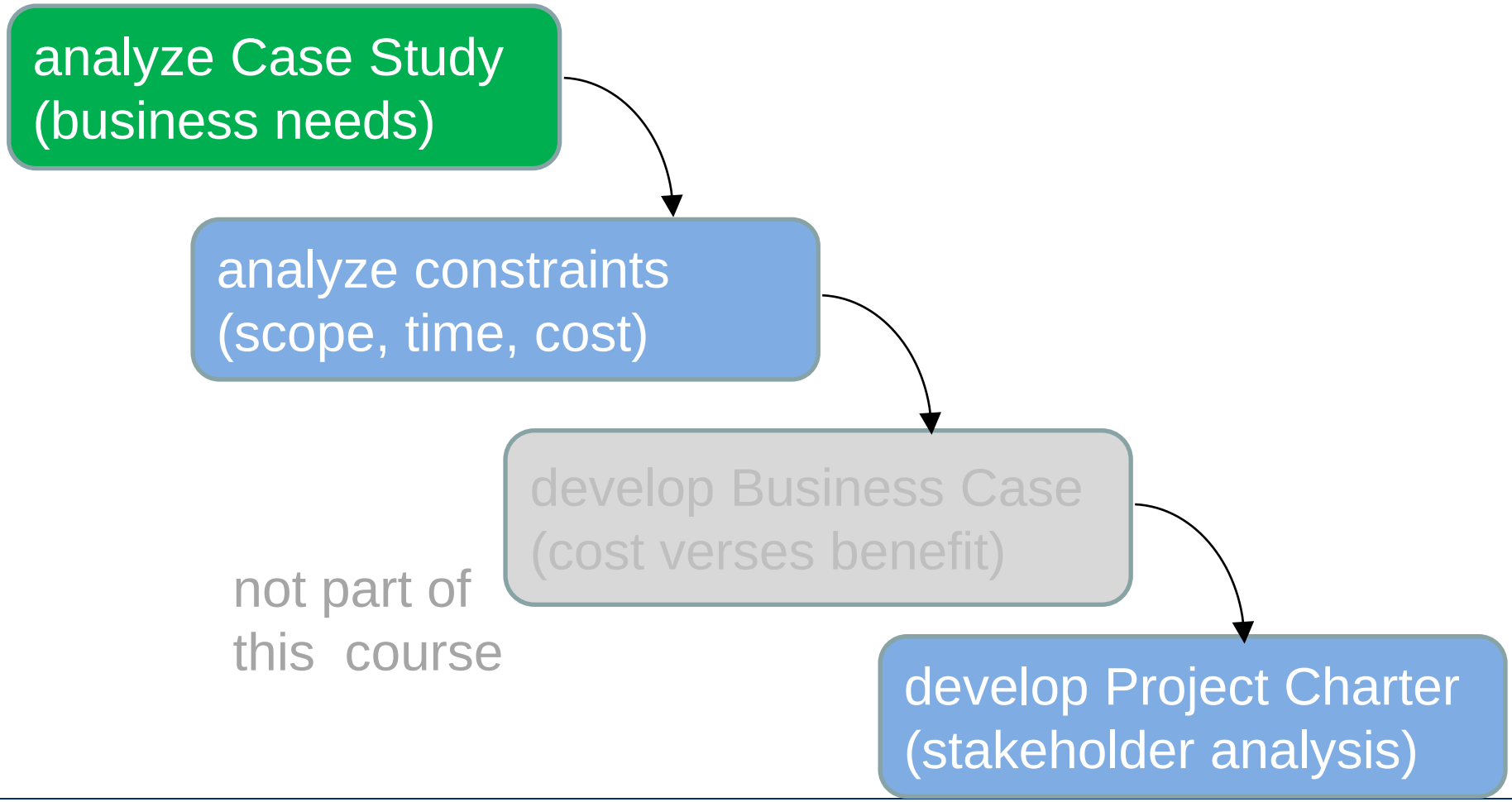
Today's aim

Understand the initialization phase by doing an activity for each phase

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

Initialization Phase

The first Project Management ***process***: initialization



Project Management Terminology

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?

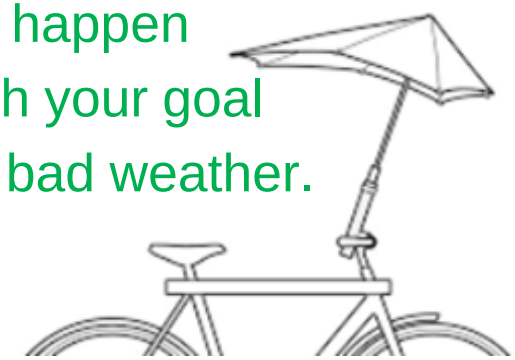
Project Characteristics

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.

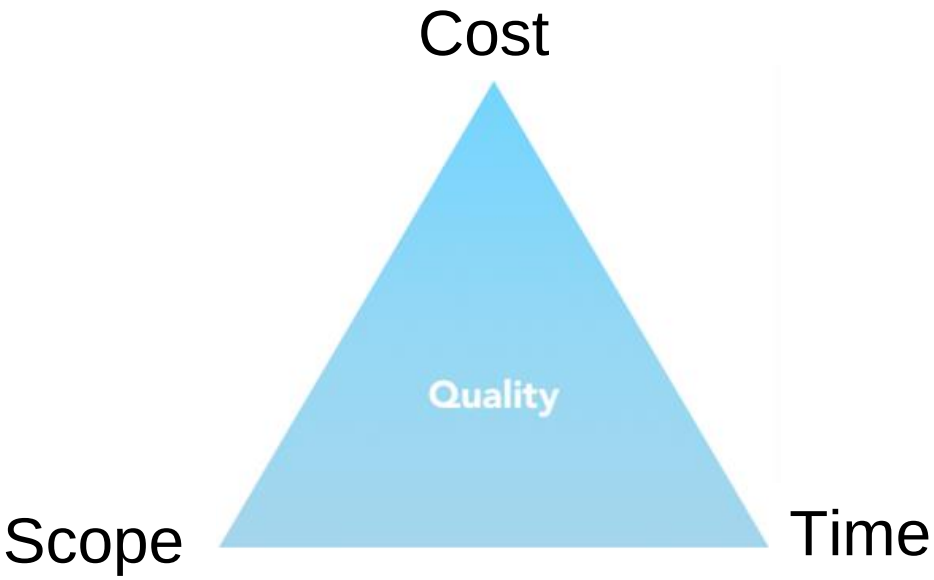


Project Constraints

Know your project's

triple constraint

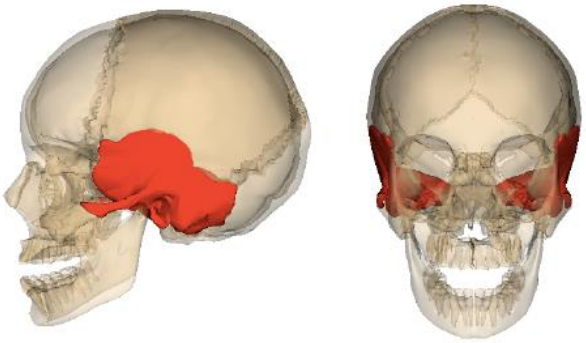
analyze constraints (scope, time, cost)



Medic Case Study

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?

Medic Case Study

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
- 4th year SWEN students take 4 subjects a semester = ¼ 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 (4th year SWEN students) at zero cost
- junior surgeon users at zero cost
- IT support developers at $50,000 pa

Medic Case Study Exercise

Project Information and Estimation

Item	Value	Reason
Team Size		
Person Days		
Cost		
Project Goal		
Key Characteristics	VR simulation enacting real-world tasks, integrate multiple hardware devices, good graphics & embedded software, QA focus	
Possible Risks		

Project Risks

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

Thank You!