## Lecture 1 — Introduction

## James Quilty

School of Engineering and Computer Science Victoria University of Wellington

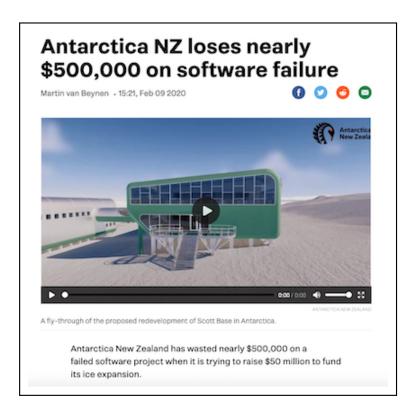
## **Engineering Project Management 1**

*"It must be considered that there is nothing more difficult to carry out, nor more doubtful of success, nor more dangerous to handle, than to initiate a new order of things."* 

— Niccolo Machiavelli, The Prince

## **Project Management Failures**

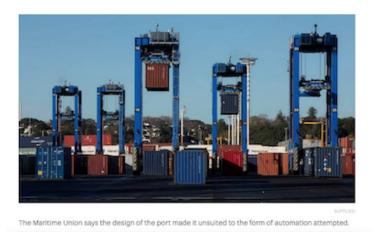
#### A couple of recent local examples:



#### Failed Ports of Auckland automation project likely to have cost \$500m, councillor says •

Geraden Cann + 05:00, Jun 15 2022

#### 0 0 0 0



## Questions for this lecture

- Why "projects"?
- What is a project?
- Why learn Project Management?

#### What is a project?

"A project is a temporary organisation that is created for the purpose of delivering one or more business products according to an agreed Business Case."

- PRINCE 2

"A project is a unique, transient endeavour undertaken to achieve a desired outcome."

— Project Management Body of Knowledge (PMBOK)

## **Project Characteristics**

A project:

- Has a unique, temporary, purpose
- Is developed in an iterative fashion
- Requires resources, often from various areas
- Typically has a primary customer or sponsor who provides direction and funding
- Involves uncertainty

## **Project Constraints**

A project operates within a constrained environment:

- Financial
- Organisational
- Human resources
- Natural resources
- Time

#### **Project Constraints**

- Every project is constrained in different ways but
- The *triple constraint* of scope, time, and cost is common to many projects
- Other constraints include quality, risk, and resource constraints

## Why Learn Project Management?

- It's *mandatory*
- The IEA Graduate Attributes (PDF) https://bit.ly/3uCi9MV
- The ECS Expectations of Students

https://ecs.wgtn.ac.nz/Main/ExpectationsOfStudents

#### Another Reason...?

#### • Software Engineer Salary in New Zealand

https:

//www.jobted.co.nz/salary/software-engineer

#### • Project Manager Salary in New Zealand

https://www.jobted.co.nz/salary/project-manager

## What will be covered in ENGR 301?

- "Classical" Project Management The Project Management Body of Knowledge,
- A Project Management Platform GitLab
- Source Control Management git, git and more git

#### Build Management

Automated as much as possible

• Dependency, Configuration, Environment, etc. What do you want to learn?

#### People

#### James Quilty — *Course Coordinator* Office: Alan MacDiarmid AM228





https://www.patreon.com/violetblue

#### Lectures

- Mondays 16:10—17:00, Cotton COLT122
- Tuesdays 16:10—17:00, Cotton COLT122
- Thursdays 16:10—17:00, Cotton COLT122
- Lectures **recorded** and **webcast** over Panopto.
- Slides typically available **beforehand**.

#### **Assessment Overview**

- Assignments 1–3 (15%) short; to support learning.
- Performance Portfolio ×2 (20% + 30%) your practical work.
- Final Test (35%) written.
- Mandatory Requirements Contribute to your project consistently; Be part of a group
- Submission online; marked by staff and tutors.
- Penalties automatic penalty of 10% per day on assignments.



- Standard in-person written examination (120 minutes).
- Scheduled during exam period (7th June 22nd June).
- Arrangements made for anyone self isolating.

#### **Class Representative Selection**

# MED WANTS TO BE CLASS KFP7

https://www.vuwsa.org.nz/class-representatives/

## **Talis Reading List**

There is **no set text**, but there are several resources in the course Talis Reading List which you should find helpful to your performance in the course.

The following book is recommended: *The Phoenix Project*, Gene Kim, George Spafford and Kevin Behr.