Lecture 1 - January 10

Syllabus & Introduction
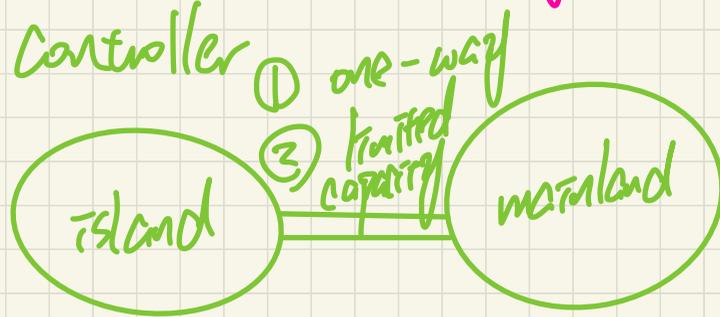
Safety-Critical Systems
Code of Ethics of a Professional Engineer
Developing Safety-Critical Systems

Safety - Critical Systems

1. nuclear power plants (Parlington). e.g.

2. auto driving.

3. pacemaker (pacemaker challenge McMaster)

4. bridge Controller ① one-way
   ③ limited
      capacity

island ⌇ mainland

Precise
  ↳ no scope of multiple interpretation
      ↳ math!

Complete
  ↳ no missing scenarios.
      ↳ all possible "executions" of the system
         exhibit the safety property.