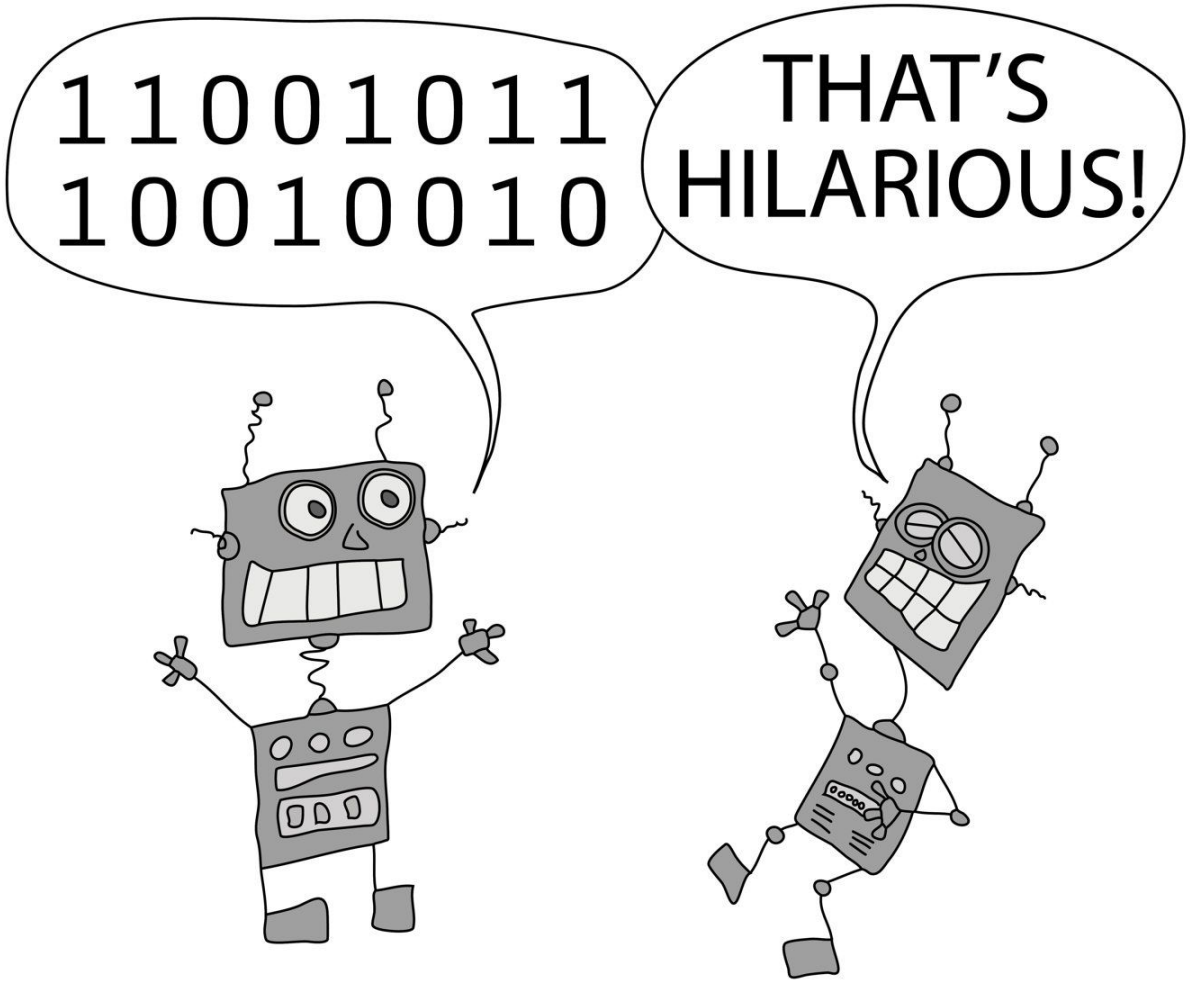
SIT217
Robotics Project

Week 1.1 – Welcome and Unit Overview



It’s Robotics and It’s project

- Robotic
  - Yes, you will be building a robot
- Project
  - You will treat it as a project, i.e. you will work on a real idea, analyse requirements, plan, design, implement in an Agile fashion, and finally test your robot(s)/project

Unit Learning Outcomes (ULOs)

1. Design and develop robotics system using appropriate software frameworks and tools and test using simulation and real environments.
2. Apply agile software engineering principles methods, tools and techniques individually and as part of a team to plan, manage, and contribute to projects.
3. Take ownership and responsibility for assigned aspects of a software project, and provide relevant evidence of achievements and outcomes against given criteria.
4. Communicate technical concepts to specialist and non-specialist audiences through a project pitch

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4. Communicate technical concepts to specialist and non-specialist audiences through a project pitch

If these are new to you, please see unit guide.

Unit Team

- Dr. Feifei Chen (Unit Chair & Lecturer)
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- Ms. Jingwen Zhou (Tutor)
  - Email: jingwen.zhou@deakin.edu.au

Structure and what we will be doing

- Based on active learning method
  - Recorded lectures and pre-workshop activities - *usually around 1 hour of materials per week*
  - Complemented learning during workshops – *2 hours per week (on campus) and 2 hour per week (cloud)*
- Need to come to workshops prepared
  - Reading/recorded materials should have been completed before coming to workshop

What you will do

- Come up with ideas for robot(s)
- Form a team (max 3 members)
- Learn Agile project management/principles
- Build your robot(s)
  - Each member should build their own robot
  - Each team will have robots built for the same idea and satisfy similar requirements
  - **Your robot should be completed by week 6**

Hardware requirement

- You will be building an Arduino-based robot
- Arduino kit can be shared with SIT123
- Depending on your project theme the robot could take any form or shape.

Assessment

- 100% Portfolio on OnTrack
  - Please make sure you are enrolled on OnTrack, if not contact unit chair

Did I say…

- You need to come to your scheduled workshops prepared, which means:
  - Read all the weekly materials
  - Watch all the videos
  - Do the pre-workshop activities
  - Have a look at your weekly OnTrack tasks (and other future tasks)

All before you come to your workshop.