# COMP10001 Foundations of Computing Welcome and Introduction

Semester 2, 2016 Chris Leckie

July 8, 2016

- Lecturer:
  - Chris Leckie (caleckie@unimelb.edu.au)
    - office: DMD 7.11 (level 7 of Doug McDonell Bldg)
    - office hours: TBA (from next week)

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#### Oefinition

Lecturer (n): person who writes/delivers the lectures, coordinates the subject, designs the projects, writes the tests/exams, informs, entertains, engages, enthuses and disentangles the undisentangleable

#### Tutors:

- Danny Minh Tuan Doan (head tutor)
- Farah Zaib Khan
- Qingyu Chen
- Milad Chenaghlou
- Zahra Ghafoori
- Lucy Joel
- Shing Sheung Daniel Ip
- Aidan Turpin
- Yoshua Wakeham

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#### **P** Definition

Tutor (n): person who runs the workshops, helps with the marking, provides sagacious advice on subject-related matters, reinforms, empathises, explains, endures (the lecturers) and helps decipher the undecipherable

#### Demonstrators:

- Kevin Then
- Chung Man Lam
- Angie Hu
- Damian Testa
- Joanna Lee
- Lachlan Dee
- Ned Lechter
- Caiti Wade

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#### Position

Demonstrator (n): person who aids the flagging tutor in running the lab component of the workshops, possibly helps with the marking, provides sagacious advice on subject-related matters, rereinforms, empathises, explains, endures (the lecturers and tutors) and helps decipher the undecipherable

# What (is the Subject all about)?

- Harnessing computation for problem solving
- Fundamental programming constructs
- Data manipulation
- Elements of maths, engineering, logic, design; dollops of creativity
- Concerned with theories, principles, limits of computation and information
- Requires logical reasoning, persistence in solving complex problems, and "technical creativity"

# What (is the Subject NOT about)?

- Learning to use word processor or spreadsheet software
- Computer hardware

# Let's Play ...

How do we solve everyday problems?

• Example: Word puzzle

# Python Programming Language

- Easy to learn: interpreted language; interactive experimentation
- Free; open source (python.org)
- Highly readable
- Cross-platform compatible
- Powerful, extensive libraries
- Widely used in industry, science, education, entertainment ...
- We will use Python v3.4 via Grok Learning

### Where and When

• Lectures (three per week):

```
Mon 2:15–3:15pm (Kathleen Fitzpatrick Theatre, Arts W)
Tue 3:15–4:15pm (PLT, Old Arts)
Wed 4:15–5:15pm (PLT, Old Arts)
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Starting in week 2, Wednesday lectures will rotate between a guest lecture, a revision lecture, and an advanced lecture

- Workshops (one per week)
  - 2 hours
  - first part is a tutorial, second part is programming lab
  - start in Week 2 (NO WORKSHOPS THIS WEEK)

### How do I Get Started?

- Check out the LMS: http://www.lms.unimelb.edu.au
- Log in to Grok Learning: https://groklearning.com/login/
- Lecture slides, lecture recordings and code snippets will be made available from the lectures/workshops page on the LMS
- Take a look over the schedule for the subject
- Check out the forums

### Assessment I

- Your subject mark will be made up of:
  - Interactive Grok Learning worksheets: 10%
  - Projects (×3): 30%
  - Mid-semester test: 10%
  - Final exam: 50%
- There will be rolling deadlines for Grok Learning worksheets, as listed on the LMS, with the cutoff for the set of worksheets released each week being 23:59 Monday of the next week (unless otherwise stated)

### Assessment II

 There are two "hurdles" for the subject: you must achieve at least 50% for the projects/interactive worksheets AND at least 50% for the mid-semester test/final exam

If you fail **either** component, you will fail the overall subject

And of course you must get at least 50% overall

# How do I Get Help?

- Post a question to the LMS forums
- Talk to the lecturer after the lecture
- Talk to your tutor/demonstrator
- Come along to the revision lectures
- If you are struggling with the subject, don't be shy about asking for help; similarly if you are experiencing documentable hardship and unable to meet submission deadlines, let us know at the time

# Secret to Subject Success

- Balanced workload of 10–13 hours per week, e.g.:
  - Workshop (2 hours attendance + 2 hours follow-up)
  - Lectures (3 hours attendance + 3 hours review)
  - Study (2 hours review/reading/study group)
- Attend, listen, ask, and share, but above all do, do, do!

# Tips from Uncle Chris I

- Lectures and workshops start 5 mins later and end 5 mins earlier than advertised
- All lectures will be recorded (audio and screen scrape) ... but try to come along to ask questions and get the full lecture experience
- Expect things to move faster and marks to be harder to get than in high school
- When learning programming, constant "practice" is the key to success
- If you email Chris, start the subject line with COMP10001, and I can take ≤ 48 hours to reply

# Tips from Uncle Chris II

- Never share any examinable code with your fellow students (not on the forums, not via email, not via shared machines, ...)
- If you need help, avail yourself of the various sources of assistance; don't expect us to come chasing you
- More detail on this in the next lecture, and also read carefully the Academic Honesty section on the Subject Overview page of the LMS

#### We Need You!

- We need 2 volunteers to act as "student representatives" for the subject, with the following responsibilities:
  - keep finger on pulse of student body
  - (possibly) act as go-between between students and teaching staff
  - attend a Staff-Student Liaison Committee meeting later in the semester to report on issues with the subject, and run a feedback session immediately beforehand to poll the student body

# And another thing ...

- We will set up an "Online Learning Centre" this semester, in the form of a virtual drop-in help centre for computing-related matters
- The current plan is to have a run a virtual version in the evening (starting in week 2)

# Things to do before the Next Lecture

- Make "comprade" friends
- DON'T go to a workshop THIS WEEK
- Check that you can access the subject LMS site
- Log in to Grok (you should be able to do this using via https://groklearning.com/login/ using your student login id and password)
- Post to the subject forum (personal testimonial, computing-related material that caught your eye, ...)