

## **MADT5234 - Test 2 Topics**

### **Date and time:**

- See Moodle
- Start time: 10:00am.

### **Test type**

- PART 1: Written - pencil and paper
- PART 2: Practical - lab based

### **Allowed Materials**

- PART 1: more than one pencil, paper, eraser, sharpener
- PART 2:
  - your own **laptop** or college system
  - Class notes in moodle
  - Google
  - **NO** EMAIL, WHATS APP WEB, MOBILE DEVICES, OR OTHER COMMUNICATION DEVICES/WEBSITE/SOFTWARE

Internet is permitted in the practical portion AS SYNTAX REFERENCE ONLY

**EXCESSIVE COPY AND PASTE FROM INTERNET  
= ACADEMIC DISHONESTY & REPORTED TO  
ACADEMICS DEPARTMENT  
= AUTOMATIC 0**

## Test Topics

- Using Git to create local & remote repositories, committing and pushing to remote repo
- Postman for Automated API testing → see class recaps in Moodle
- Android:
  - Automated unit testing with Junit and/or Robolectric
  - Automated ui testing with Espresso and/or Robolectric
- IOS
  - Automated unit testing with xcTest
  - Automated ui testing with xcUnit
- TDD - Test Driven Development
  - Building apps & unit tests with TDD
  - Red-Green-Refactor
- [TBD] Javascript
  - Behaviour driven test with Jasmine/Mocha/Karma/Jest
- Formal Black Box testing
  - Equivalence testing
  - Boundary value analysis
- Formal White Box testing
  - Equivalence testing
  - Boundary value analysis
  - Statement testing
- Code coverage tools
  - What is code coverage?
    - % of code that is tested through your test cases
    - Which parts of you code has been tested
    - Which parts are NOT tested
  - IOS - XCode Code Coverage Tool
  - Java - ECLEmma Code Coverage