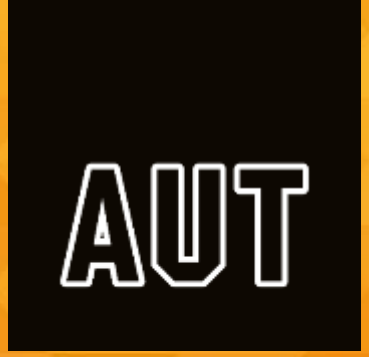


Project Portfolio

COMP703/709 Part 2

Session Outcomes

- Review the requirements and process for:
  - Final Project Portfolio & Product

What have you done?

- **Over the last year you and your team have:**
  - Presented a proposal
  - Worked with your client to identify the project goals
  - Worked with each other to do the best job you can
  - You have learnt from a mid-project review
  - Produced some things that may or may not be what you had expected to produce at the start
  - Planned, researched, read, written, reported, designed, developed, tested, installed and hopefully learned a lot.

Portfolio Submission

A OneDrive Backup

- One team member **must** create a folder in their AUT OneDrive and backup the teams final portfolio
- Share this folder with your mentor, moderator and Ramesh and Jing (Julia) Ma via an emailed link
- Prepare a PDF to submit to canvas that contains a link to the portfolio as well as any details needed log and password details so that the markers can access other systems (like Trello)

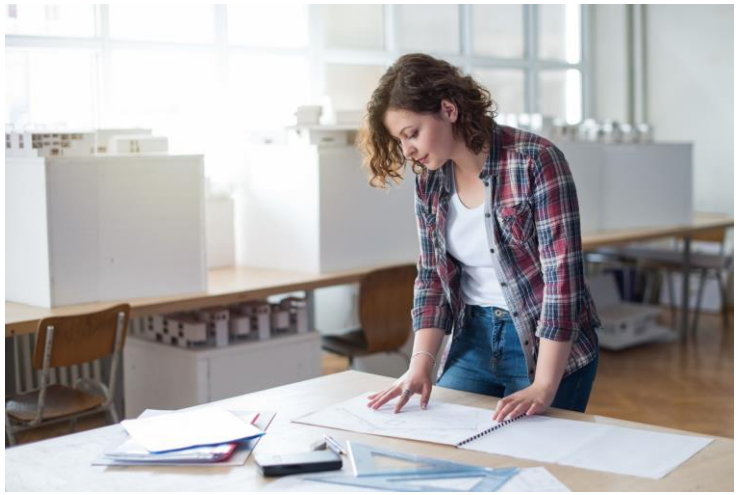
Project outcomes

- The outcome of the Research & Development Project will be one or more **products** of some sort (for example, an installed system, a report or a series of reports on a completed enquiry, a piece of software, an IT strategy or infrastructure or plan) that achieve the goals identified by the client.

- In addition, there will be a portfolio that **evidences** both the products/s and **how they were created**. Your portfolio provides the material that supports and makes visible the team and individual work that went into the project.

Team & Individual Effort

- Portfolio belongs to the team
- Provides evidence of all work done in the project
- Provides evidence of individual contributions to the project

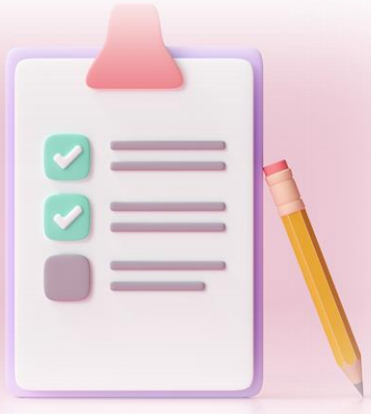


Jointly and severally liable

- “It is not unusual to find that the work done has not been spread evenly amongst the team.”

- “Where your evidence indicates that this is the case (e.g., author names (or lack of) in material, log book evidence, version control check in records, poor number of total hours completed by student, your own observations (recorded as a mentor) you should mark the students concerned differentially based on their contribution. Please ensure that this evidence is noted in the feedback forms so students are clear how their grade has been arrived at.”

What are Assessors looking for?



<u>Evidence</u> of your:

- Planning & Control
- Communication & Teamwork
- Development or Design of a Product
- Quality Assurance and Control Practices

<u>Your products (and versions of them)</u>

- Evidence of authorship (individually & collectively)
- Is your name on the artefacts (and versions of artefacts) you have contributed to? (e.g. creation/authorship, refactoring, redesign, peer review, inspections, testing?)

What makes a good portfolio?

- Well-structured and professionally presented
  - Your assessors should be able to readily access all the material using a clear and well-defined index structure.
  - Use hyperlinks to link related documents or link to a version control system (e.g. GitHub) or other online records (e.g. Trello board or Visual Paradigm project)
  - Ensure if passwords are required to access artefacts that are provided in the portfolio
- Complete.
  - All your evidence should be there. Some may be in the main portfolio and some as appendices (e.g. emails).
  - If you have physical material (e.g. drawings, notes, and task boards) take photos so that it can be included in the portfolio.
  - If using a tool like Trello, screen shots at the end of each sprint is a good idea as well as a link to the current working board.

What makes a good portfolio?

- Addresses evidence categories clearly:
  - It should not be necessary to ‘search’ for a category of evidence.
  - Should provide an easily navigable structure with meaningful folder names
- Provides a clear history:
  - The thread of activity should be there e.g. versions of material used, plans, designs, models, prototypes and code.
  - It is **not** adequate to just provide final versions we want to see your progress over time.
- Evidences adequate work:
  - The evidence should support adequate work for each individual in the team. 15 hours per week, per semester, per member.

Warning!

- Do not assume that markers can access tools outside of the AUT ecosystem.
- Do not assume cloud-based systems will be available at the time of marking or that your work will not be lost
- Ensure back-ups of records of work done over time on other systems is available.
  - Trello – take snap shots at key points
  - GitHub- keep periodic offline copies of code base and commit records
  - Figma – take backups of designs
  - Visual Paradigm Online – down load models to PDF
  - Cleaned data for ML (have folder of raw and cleaned data)
  - Back up R/Weka/Matlab files and results of experiments conducted
  - Etc…

Folder Tree and Index

- You should already have a structured portfolio
- Review your existing portfolio's folder tree and index
  - Does it need refactoring
  - Create a checklist of refactoring's needed
- An index or folder tree helps the assessors navigate your portfolio

Tip: Now is a good time to revisit your portfolio's structure as a team, and then with your mentor, to ensure that your portfolio is complete and well structured.

Structure

- Research & Upskilling
  - Research on product ideas, evidence of upskilling, research on technology and tool selection, any other research documents/report, architecture plan, platform reports, usability investigations and reports, and feasibility assessments
- Planning and Control
  - Evidence of sound and effective planning and control processes, including rationale for project decisions. Versions of your proposals, reporting, and scheduling.
- Teamwork and Communication
  - Evidence of sound and effective communication and collaboration with team members, supervisor, client, stakeholders.
- Development Activities & Quality Assurance
  - Quality and completeness of all development activities and outputs (work products). Quality and completeness of final product(s).

Organising your evidence

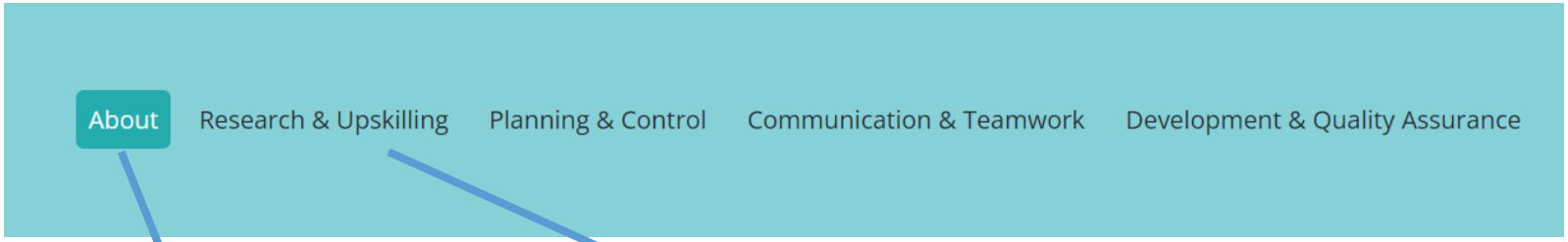
- Add evidence based on the PM methodology and methods used to the relevant areas in the prescribed structure

E.g. SDLC
Planning
Analysis
Design
Development
Testing
Implementation

E.g. CRISP-DM
Business Understanding
Data Understanding
Data Preparation
Modelling
Validation
Deployment

E.g. Scientific Experimental LC
Problem Investigation
Experiment Prototyping
protocols, processes-workflow
Experiment Execution
validation, control, analysis
Dissemination of Results

Example: NIWA



Started with an entry detailing the objectives of the project

Assessment Coversheet

- Group Coversheet

Key Project Artefacts

Proposals

- Project Proposal - v1.0
- Project Proposal - v1.1
- Project Proposal - v1.2
- Project Proposal - v1.3

Posters

- Poster - v1.0

Research

- Project Development Method Research
- Project Development Method Rationale
- Tools Feasibility Report
- Research Report

Upskilling

- Team Skills Analysis and Matrix
- Upskilling Plan - v1.0
- Upskilling Plan - v1.1
- Upskilling Plan - v1.2

Also included learning journals and logs for each team member

Planning

Project Charter

- Project Charter - v1.0
- Project Charter - v1.1
- Project Charter - v1.2

Scope Statement

- Scope Statement - v1.0
- Scope Statement - v1.1

Work Breakdown Structure

- Work Breakdown Structure (WBS) - v1.0
- Work Breakdown Structure (WBS) - v1.1

Communcations Management Plans

- Communications Management - v1.0
- Communications Management - v1.1

Design Documents

- Lo-Fi Prototypes
- Architecture Component Diagram - v1.0
- Architecture Component Diagram - v1.1

Project Planning & Control (10%)

- Regularly updated project schedules
- Tracking of requirements
- Clearly documented **rationale** for project decisions
- Clearly documented **rationale** for changes in project
- Research Reports (existing systems etc.)
- Identification
- Milestone/Status reports
- Time tracking
- Meeting minutes
- Revisions of Proposal (based on feedback and project changes)
- Multiple versions of **project plan** from the first ->latest

Teamwork & communication (10%)

- In essence this is about stakeholder relationships and teamwork:
  - Team agreements
  - NDA (Non Disclosure Agreement)
  - Team role(s) information
  - Team contract
  - Correspondence and meeting records [Minutes, Agendas, Email records] within team, with clients, with other stakeholders.
  - Meeting artefacts
  - Client reports
  - Issue log

  - Others?

Development Activities and Work product (25%)

- Three dimensions:
  - Completeness and quality of product development activities
  - Completeness and quality of quality assurance & control activities
  - Completeness and quality of final product

Development activities

What type of things would be evidence in this category?

- Requirements, specifications
- Change log
- Research questions, research data collected, Research report
- Experiment designs and evidence of results of experiements
- Data Exploration and Data cleaning (process and results)
- Design Models, (Lo-fi) Prototypes, Mock-ups
- Technology evaluations
- Designs –(UI, Architecture, and persistent data)
- Database architecture, modelling and normalisation
- Code + Code reviews
- Executable software + versions
- Client reports

Quality Assurance & Control activities

What type of things would be evidence in this category?

- QA goals, standards, expectations and plans
- Test strategies
- Unit tests, Acceptance Tests & execution evidence
- Regression testing records
- User profiling
- Usability testing material and reports
- Review records and decisions made (e.g. sprint reviews)
- Guidelines, templates, configuration management procedures used
- [Fagan] Inspection reports or peer review
- Bug/defects/Issue log
- Records of client feedback and sign off on designs and other key artifacts.

Final Product

What type of things would be evidence in this category?

- Final system testing
- Handover plan and implementation of the plan
- User manuals
- Training Plan
- Product backlog
- Enough information for another team to take over the project

Portfolio Checklist

TO DO: Create your own portfolio check-list

- ☑ Product
- ☑ Logbooks
- ☑ E-Copies of Meeting Minutes
- ☑ E-Copy of Poster
- ☑ E-Copy of Project Proposal (all versions)
- ☑ E-Copy of Mid Project (all versions)
- ☑ Completed Client Feedback Form
- ☑ Electronic copy of client handover (check with mentor)
- ☑ Weekly schedules, Gantt chart, burn down chart, retrospective meetings, etc.