

COMP2003

Computing Group Project

40 CREDIT MODULE

**ASSESSMENT: 80% Coursework
20% Practice**

MODULE LEADER: Dr Ji-Jian Chin
CO-TEACHERs: Ali Golbaf
START UP ADVISOR: Tyler Cheng

MODULE AIMS

- To develop the skills required to participate in a live, team-based online/offline software development project within a project management paradigm.
- To apply appropriate design process, take charge of development milestones, evaluate their software solution as well as consider the broader context of business, legal, social and ethical elements on project delivery.

ASSESSED LEARNING OUTCOMES (ALO):

1. Work as part of a team in identifying, analysing, proposing and documenting a solution to a specific problem appropriate to the degree and/or field of study.
2. Implement an effective solution using appropriate techniques for appropriate legal, social and ethical constraints.
3. Evaluate and reflect upon the suitability of the solution to the given problem.

OVERVIEW

This document provides information regarding the *COMP2003 Computing Group Project* module. You will find information here regarding how the module will be delivered, the important dates you need to keep in mind and how the module will be assessed.

This module is a whole year module that will provide you with the opportunity to bring information and ideas together from different topics. This is the application of technology to solve a problem where you make use of your previous learning and interests and apply it to a problem that is relevant to your degree.

You are required to work in a distributed team environment, using agile project management to deliver a technical solution of certain complexity. This module serves as an integrating project to bring together the various aspects of the full software lifecycle. You will be expected to identify the problem area, present a clear understanding of that problem area, consider how you apply robust software engineering principles to creating a software solution, carrying out analysis and design to an appropriate depth, communicating your software architecture and plan using appropriate diagramming techniques, applying appropriate testing strategies to ensure a quality product and process.

The module is complimented by shared topics delivered by SECAM staff where appropriate. There will be materials provided on the DLE combined with synchronous sessions during the early part of the module to ensure you have the appropriate skills.

MODULE DELIVERY

The training content of the module will be delivered in approximately 10 hours of lectures at the beginning of the semester. Further content will be provided on the DLE to augment the necessary skills. For the remainder of the semesters, seminars are planned for different cohorts of students which serve as scrum review meetings between students and teaching staff.

The topic areas of importance are supported by materials on the DLE. Students are encouraged to work through the materials at their own pace and use the seminar sessions to ask questions, seek guidance and clarify their understanding. Specific details will be posted clearly on the DLE.

Students are expected to work independently. After three weeks of the module, you should be working towards being in a small, distributed team, following agile principles, using online project management tools for an iterative production. Teams will need to present and report every two weeks to their clients/stakeholders where applicable.

Staff Member	Contact Details
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ASSESSMENT

The assessment for this module is made up of two parts, 80% coursework and 20% practice. Within each of those parts there are two elements with submission points at the end of each Semester in addition to the interim deliverables. Submissions in Semester 1 are worth 30% of the final mark for that element and Submissions in Semester 2 worth 70% of the element.

	Coursework	Practice	Weight
Semester 1 (Interim)	80 (24 marks of total)	20 (6 marks of total)	30%

Semester 2 (Final)	80 (56 marks of total)	20 (14 marks of total)	70%
Total Marks	100	100	100

The assessment criteria are as follow:

Semester 1 Interim Submission

Coursework (80%):

Group Marks

- 1) Product (30%)
 - An accepted project proposal
 - A minimum viable product/prototype
- 2) LSEP (10%)
 - Project/business proposal addresses LSEP issues: legal compliance, ethical guidelines, social impact, professionalism, risks, sustainability, and continuity.

Individual Marks

- 3) Process (30%)
 - Engagement with teammates and stakeholders
 - Contributions to the project demonstrated during seminars.
 - Personal conduct
- 4) Evaluation (10%)
 - Contributions to the team through notable events.
 - Demonstrated leadership qualities.
 - Lessons learned.

Practice (20%):

Group Marks

Within a 10-minute presentation group presentation:

- Articulation of the project planning process and design decisions
- Demonstration of an initial prototype/minimum viable product
- Answer questions from the panel

Semester 2 Final Submission

Coursework (80%):

Group Marks

- 1) Product (30%)
 - Fully working product
 - Report
- 2) LSEP (10%)
 - Product design addresses LSEP issues: legal compliance, ethical guidelines, social impact, professionalism, risks, sustainability, and continuity.

Individual Marks

- 3) Process (30%)
 - Engagement with teammates and stakeholders.
 - Contributions to the project demonstrated during seminars.
 - Personal conduct
- 4) Evaluation (10%)
 - Contributions to the team through notable events.
 - Demonstrated leadership qualities.
 - Lessons learned.

Practice (20%):

Group Marks

Within a 10-minute presentation group presentation:

- Articulation of the project planning process and design decisions
- Demonstration of an initial prototype
- Answer questions from the panel

Threshold Criteria:

Threshold criteria for interim and final coursework will be uploaded as separate documents on the DLE.

TEAM MANAGEMENT

Team Formation/Allocation

Team formation can be done as early as week 1 during the Lecture 1. There will be an icebreaker event for you to get to know your fellow course mates and decide if you wish to form teams. A second opportunity to form teams will be conducted during Lecture 2. Students without any teams after Lecture 2 will be assigned by the module leader. All teams will be finalised by the end of Lecture 3 (30 September 2024). Teambuilding activities will begin in Lectures 3 and 4.

Project Types: Client-based or Entrepreneurial

All teams must choose a project that will either be client-based or entrepreneurial in nature.

For client-based projects, project briefs will be put on the DLE on 8th October 2024 for teams to consider, and there will be a networking session on 14th October 2024 where teams will meet and network with these clients and find out more about the project specifications and requirements. Teams can then bid for the project. Each team will be allowed a maximum of 2 bids. The clients will decide which teams they want to work with.

Teams that cannot find a client to work with or feel strongly about startups will be placed under the entrepreneurial track. The module leader and tutor will then serve as stakeholders for the team in lieu of client. The number of teams allowed for entrepreneurial projects will be limited and the number is based on the remaining groups after all client-based projects have been filled. If a team wishes to embark on the entrepreneurial track, the team needs to submit a justification request on the bid template to the module lead by 14th October 2024 with details on their business proposal.

There may be some rearrangements and negotiations between 21-25 October 2024, where the module lead may call for meetings to negotiate any conflicts in the allocations. The allocations will be finalized by 25 October 2024. **The module leader will have final decision on team allocations.**

The project will have deemed to commence immediately after successful allocation and will run to completion upon:

- 1) On the clients' side, a sign off on the User Acceptance Test in Semester 2, or for entrepreneurship, a signoff by main stakeholder(s).
- 2) On the module side, submission of all materials and completion of practice presentation on the DLE on 6nd May 2025.

Other important dates will be notified in the SCHEDULE FOR IMPORTANT DATES below.

Client / Project Networking event

Clients will have provided a summary of their project which will be available on the DLE by 8 October 2024. Teams are expected to study these briefs prior to the networking event. On 14th October, clients will attend

the University to participate in a networking event with students. This is going to take place across labs SMB100, 108,109 and 201.

(May change due to timetabling issues.)

The agenda for the morning is as follows:

14:00 Assemble at SMB108 for the final short lecture.

14:30 Clients arrive and set up at SMB100, SMB109 and SMB201. Teams move around to meet.

17:00 Client sessions conclude. Project bids to be placed.

During the networking part of the session students are expected to move around and speak to clients of projects the team is interested in. Clients will be looking to find students who understand their project ideas and they will provide the module leader with their preferences.

During your interaction with clients, decide on questions beforehand and arrange who in the team will ask which questions. All the team are expected to attend. Attendance is part of the marking schema.

Start-up teams who make the decision to be on the entrepreneurship track should solidify their business idea during this session with their main stakeholder.

SPRINTS

Once the topics are decided, sprints will begin to take place. Evidence of meetings are used in the Process assessment and must be submitted within 24 hours of the meeting on the GitHub repository.

SPRINT MEETINGS

Hold regular sprint meetings among team members, advisedly at least once a week (in actual agile groups these meetings happen every day). All members are expected to attend and talk about what they have done and what they plan to do. Settle any design conflicts there. Progress on the project should be documented. Time off should be negotiated between members. All meetings must be recorded in minutes and placed in the group's git repository.

CLIENT MEETINGS

Client meetings are arranged under the group and should happen advisedly once a fortnight (every two weeks). However, due to the availability and commitment of clients this can be adjusted on per project basis but should happen at least once a semester. All members are expected to attend the meeting, with the product owner serving as the chairperson. Members are expected to behave professionally with clients. All meetings must be recorded as minutes and the minutes must be placed in the group's git repository. Complaints from client about non-engagement will result in marks penalty.

SEMINARS/Sprint Reviews

Each team is expected to attend timetabled seminar sessions each semester that serve as scrum review meetings. These sessions are timetabled, and attendance of all members is expected. Seminar sessions may double as client review meetings if the client is available to attend, otherwise client meetings need to be arranged and run as separate sessions.

The results of these seminars are included in the marks so come prepared. The agenda during these seminars are:

- 1) Progress report during the sprint. (What was done)
- 2) Further plans on the project. (What is to be done)
- 3) Contributions of individual members. (What worked)
- 4) Problems encountered (What didn't - teaching staff will advise on solutions)

Common Problems

Based on past experiences running the module, these are the following cases of some common contingencies encountered and how to manage them:

- 1) **Project changes** – no project changes are allowed once allocations are finalized by 25th October 2024. The project must proceed despite changes in client and/or team.
- 2) **Changing client** – no client changes are allowed once teams and clients are finalized by 25th October 2024 except a non-engaged client is encountered. Definition below in item 4.
- 3) **Changing team** – no team member changes are allowed unless under cases:
 - a) under item 6 below or
 - b) addition of new members to the team under the module leader's discretion. Case b) may be due to one team member left due to other members dropping the module and needs to be reallocated, or new enrolments.
- 4) **Non-engaging client** – the definition of a non-engaged client is a client who is uncontactable for a maximum of 2 sprints (4 weeks). In matters arising such as this, module leader and tutor will stand in for the client role until client re-establishes contact, while the module leader and tutor will try to remediate the situation. The project can still carry on under initial design agreement under module leader's supervision. All procedures during this period must be fully documented.
- 5) **Client disengagement** – a client can choose to disengage from the module at any time without the need for strong justification (usually due to urgent matters arising or unable to commit further resources). In this case, module leader and tutor will stand in for the client and the project will proceed under module leader's requirements in succession. The team's work will proceed as initially stated under project brief and proposal under module leader's supervision.
- 6) **Non-engaging team member** – the definition of a non-engaged team member is one who is uncontactable for a maximum of 2 sprints (4 weeks). If this happens, speak to the module leader for necessary action. All procedures during this period must be fully documented.
- 7) **Mental/Physical Health Issues** - Members having mental/physical health issues are expected to notify their teammates about periods of absence, which should be recorded under minutes. Teams should plan work around these contingencies. Disability services support letter is required for such absences.
- 8) **Dispute in contribution** – all marks on product are to be divided equally among team members. In case this is not agreed upon by team members, a marks reallocation email with form attached and all members cc-ed on how to scale the product marks needs to be made to the module leader before the submission deadline, with the relevant scale and rationale articulated clearly. Settle the dispute internally before emailing this request, as one team can only send this once (only the first email will be considered, subsequent requests will be ignored). If help is required to remediate, the module leader/tutor will call a meeting prior to the request being sent. The form will be made available on the DLE later in the semester.
- 9) **Disputes in project design and direction** – these disputes are to be resolved internally within the team under consensus but be professional during the process.
- 10) **Professional conduct** – team members who behave unprofessionally and do not show good team spirit in working together may be penalized if there are multiple complaints from various team members. It is in everyone's best interest to work well together and settle disputes amicably. Learn to compromise and practice polite communication.

The handling of all disputes will be done in consensus by module leader and tutor, and in certain cases under advisement by Stage 2 Tutor and Programme Manager. Decisions made will be final.

DELIVERABLES

Interim Submission:

- Project/business proposal including software design specifications.
- Basic working prototype.
- Minutes of seminars and client meetings under the GitHub repository.
- Presentation video.
- Personal reflection document (documenting participation, contribution to the group and personal thoughts about the project experience).

Final Submission:

- Signed user acceptance test (UAT) by the client or endorsement letter by investor.
- Fully working product.
- Final report.
- Slides
- Member contribution form.
- Client/Investor instruction manual.
- Presentation video including demonstration.
- Minutes of seminars and client meetings under the GitHub repository.

Further deliverable details will be provided on the DLE once the projects commence.

SCHEDULE OF IMPORTANT DATES

Element/ Deliverable	Description	Date/Deadline	%
1	Team formations	Monday, 23 th September to 30 th September 1pm	
2	Client / Project Networking event	Monday 14 th October 2pm to 5pm	
3	Project bid Allocations finalized by 25 th October	Friday 18 th October 5pm	
4	Initial meetings with clients/investor Meetings to be arranged by student/team	End of Planning Sprint 1	
5	Project plan validation meeting Meetings to be arranged by student/team	End of Planning Sprint 2	
6	Prototype development Reach a working prototype/minimum viable product	Run development sprints for Semester 1	
C1/W1	Interim Submission Interim deliverables on GitHub with evidence via DLE	Tuesday 7 th January	30% of C
P1/W1	Prototype demo Team presentation of initial prototype and design documents in showcase	Friday, 17 th January	30% of P
7	Development sprints begin. Check in with client every two weeks.	Beginning December in Semester 1 and carrying on throughout Semester 2	
8	UAT and Handover to client Presentation to client	28 th April to 6 nd May	
C1/W2	Final Submission	6 nd May @ 3pm	70% of C
P1/W2	Showcase Presentation Team presentation of final product in showcase.	16 nd May	70% of P

REFERRAL

Students are allowed 2 attempts at any module. However, without Extenuating Circumstances (EC's) the second attempt is then capped at 40%.

All marks for assessments are provisional when issued to you. They become confirmed after a panel meeting that takes place in June. After that panel, if you have failed the module, the panel can offer you one of two decisions. The first decision may be to offer you the chance to take the module again over the summer, or if you have failed several modules, they may offer you the chance to repeat the module the following year.

Please note doing the module as a referral is not easier. In some ways it is harder because there is no more tuition. A referral is not recommended for anybody who has not been able to engage with the module throughout the year.