Iteration Specification & Guidelines and Template

***Important Note:* Generative AI tools are *NOT* allowed to be used in this unit's assignments unless it is specified in their instructions and guidelines.**

Ensure you also review the Iteration Progress Review Checklist which can found in Moodle

Due Dates & Weighting

Leankit, Project Governance Portfolio (PGP) and Innovation will be assessed by your mentors. **It is mandatory criteria that the project be IT for social good and not ICT-specific ethics issues: adverse stakeholder impacts of ICT, surveillance and privacy, data matching etc.**

The below deliverables should be published to your PGP or Moodle (where stated)

Important: A team information document is to be created in your PGP to record your product credentials and links to each iteration.

Deliverable to Project Governance Portfolio	**Weighting (Out of Assignment 1)**	**Due date**
Iteration 1 System Analysis & Design and proposal presentation Completed Iteration 1 Build Retrospective Artifacts & E-portfolio	10%	Week 5 - Monday 11.55pm AEST Week 6 - Thursday 11.55pm AEST Week 6 - Friday 11.55pm AEST
Iteration 2 System Analysis & Design and proposal presentation Completed Iteration 2 Build Retrospective Artifacts & E-portfolio	25%	Week 7 - Monday 11.55pm AEST Week 9 - Monday 11.55pm AEST Week 9 - Tuesday 11.55pm AEST
Iteration 3 System Analysis & Design and proposal presentation Completed Iteration 3 Build Retrospective Artifacts & E-portfolio	30%	Week 9 - Thursday 11.55pm AEST Week 11 - Monday 11.55pm AEST Week 11 - Tuesday 11.55pm AEST

Learning Outcomes for this deliverable

1.Critically analyse complex information relevant to an advanced specialist domain and identify information requirements interpreting how they may be of benefit to an organisation or a community, including addressing security needs and ethical concerns.

2.Analyse how specialist domain projects are developed and evaluate the underlying principles and reasons underpinning each aspect of the development process, proposing the need for and then using a context driven methodological approach to deliver, ensuring security considerations in order that the final product is not only effective but also resilient against potential threats and vulnerabilities.

3. Differentiate and synthesise the interrelated roles and responsibilities of all stakeholders of a project and assess and analyse why these roles are important for a successful project.

4. Apply, in an industry standard setting, new concepts as well as aspects of theoretical approaches already learned, selecting the most appropriate fit for a specific situation and the rationale for that selection applying investigative research, while ensuring the end result has a responsible impact on society.

5. Demonstrate discernment and judgement in effective two-way communication to all stakeholders/audiences, both specialist and generalist, by using innovative, relevant and meaningful mechanisms to disseminate knowledge and ideas

6.Contrast and apply the most suitable professional practice skills on issues relevant to the chosen area of practice and operate effectively as a member of that practice team; including understanding the ethical and social responsibilities of IT professionals and teams.

7. Evaluate, assess and communicate both personal and team progress and learning, thus engaging in meaningful reflective practice of one's self and the outcomes and process of the project

Aims

The aims of this deliverable are to:

- Demonstrate your understanding and document as required the detailed requirements for the defined set of functions specified for this ‘Iteration’;
- Design a system to satisfy the Monash mentors and the industry mentors expectations specified for this ‘Iteration’; and which integrates with previous working ‘Iteration’ functions (if necessary);
- Demonstrate the ability to listen and take on board feedback or discuss appropriately and knowledgeably why you do not;
- Demonstrate the ability to interact with senior executives from industry and present accordingly;
- Demonstrate the ability to manage on-going changes to requirements;
- Adhere to the standards developed for the system and the project;
- Demonstrate that this ‘Iteration’ works as specified;
- Demonstrate the ability to develop a system to industry strength standards, including maintainability (system and build), testing and so on;
- Facilitate comprehensive feedback and acceptance from the industry mentor for this ‘Iteration’;
- Evaluate, assess and communicate through reflection of achievements through using retrospectives.

The Iteration deliverable is intended for all of the project’s major stakeholders: the industry mentor, the academic supervisors, possible sponsors and the development team. The industry mentor may use the deliverable and informal presentation to ensure that their feedback and any changing requirements have been understood and to provide further detailed feedback. The report will help the whole project team understand what has to be delivered in this iteration, industry mentors (and possible sponsors) understand further, the way in which the project will be conducted and the functionality expected to be delivered in the iteration. The industry mentor will view builds out of Iterations, as they understand the intended audience (for whom it is being developed) would use them.

The academic supervisors (Monash mentors) will check that the work performed is of appropriate quality and has incorporated appropriate feedback, having already provided feedback on the deliverable (during Iteration reviews) as the Iteration progressed, and will assess the final version of the deliverable. (See Iteration review details on Moodle.) The development team will also use the deliverable as the basis for the development of further Iterations and the management of the continuing project.

Submission

- The submission will take the form of an iteration analysis artifacts and iteration proposal presentation and deployed build for review (**the build link for that iteration must not to be changed after submission**) and artefacts/notes from the retrospective.The iteration analysis report must be submitted to the project governance folder. The software, a link provided in the report must be ready for testing by us by the due date. Access (via links) must also be available for all supporting artefacts, such as industry mentor meeting minutes, Leankit etc in your project governance folder. The retrospective artifacts will be added to the team project governance folder after feedback from the mentors. Please note your retrospective artifact is part of your grade.

- You must negotiate any extensions formally with your campus unit leader via the in-semester special consideration process. Late submission without approval will be subject to a 10% deduction per day (including weekends) of the mark received for the submission. Please note extensions are unlikely to be given due to the nature of the unit requirements.

Description

This submission has the following major components:

1. Analysis & Design Artifacts include:
    a. Iteration Analysis & Design Report
    b. Iteration Proposal Presentation
    c. Project Governance Portfolio , Leankit, Industry Mentor e-portfolio
    d. The Build
2. Retrospective Artifacts / Notes

Guidelines and Template

The following guidelines provide an indication of content that should be included in each section of your Iteration deliverable. As you produce different versions of your system, you may need additional information in your specification or not need some of the items specified in the guidelines.

An iteration consists of:

- Leankit
- Project Governance Portfolio up to date at all times (at any given time, it should reflect the current state of your system
- Analysis Report and presentation to Moodle (what is to be delivered in this iteration)
- Testing, data management plan and security report (should match A&D report)
- A pen test report (complete by MCS only)
- Completed build
- Retrospective and followup actions
- E-portfolio

All aspects of the iteration will contribute to your teams mark for the iteration.

Section A: Iteration Analysis & Design Report (2 to 3 pages)

The report should:

- Should demonstrate understanding of iteration specification guidelines, future plans, and relevant processes/artifacts.
- Well-presented and professional, generally adhering to team formatting guidelines.
- Concise and relevant with good use of english.
- Demonstrates a good understanding of the target audience.
- Well-organized structure and include all required materials.

Title Page

This should be treated as Industry standard not as an assignment. An example could be a photo that resonates with your project topic, team name , team logo and team number.

Introduction

This contains four lines or so of what this document is to be used for. (Important: The report along with all our analysis and design artifacts informs your build and will be reviewed throughout the build process.)

Project Overview

The project overview gives:

- Brief description of the project - The problem statement
- Target Audience - Brief description of your intended audience (2 or 3 lines)which the WHO. Must reference a current news article of the intended audience and must use a different news article for each iteration.
- Personas profile **(https://www.usability.gov/how-to-and-tools/methods/personas.html)**
  For the intended audience of your iterations up to this point. This will help you work out who you are designing for, and encourage you to be empathetic and see how they can use your application and if it fits their needs.

Current Iteration

- **High level Solution**
  A brief description of what you **plan to deliver** in this iteration which aligns with your **User Stories and Acceptance Criteria** defined for this iteration in LEANKIT. What is being delivered, the **intent** for this iteration and what are the **benefits** of each of the requirements (features) to the user. You must address the following:
  - What will be built
  - Why is important
  - List the related user stories that will be needed to complete it
- **Changes from previous iteration** (only as of iteration 2), not what was added but changes to previous version). Any amendments to the original system design report, including reasons for change.

Section B: Leankit

Insert <Link to your Leankit which will have your epics, user stories, acceptance criteria , analysis and design cards>

Your project's LeanKit board serves as a dynamic, collaborative workspace and a key artifact for demonstrating project management proficiency at the postgraduate level. It must be accessible to your

development team and studio mentors, who will regularly review its contents. The board's structure and content should reflect mastery level for critical thinking, problem-solving, and professional communication.

The LeanKit board should serve as a central communication hub for the development team and mentors, facilitating transparency and shared understanding of the project's progress.

Epic, user stories and acceptance criteria are managed throughout the iteration, in and out of studios and continuously updated.Leankit will be reviewed by studio mentors. The target audience are your development team and your mentors (who will be reviewing)

Leankit Structure at a basic level:

Backlog lane

This is a dynamic repository of all identified epics, functions, and ideas, prioritized using the MoSCoW method (Must have, Should have, Could have, Won't have).

Epics should be clearly identified with their respective iteration target, estimated effort, and priority. The backlog must be continuously updated and refined based on backlog grooming sessions, mentor feedback, and evolving project needs.

Current Iteration lane (To do)

- **Epics , User stories awaiting clarification:** These are user stories that require further discussion or clarification to ensure they are well-defined and understood by the team.
- **User stories awaiting dependencies:** These are user stories that cannot be started until other dependencies (e.g., other user stories, external factors) are resolved.
- **Newly created epics:** Large features that have been broken down into smaller user stories. These epics may remain in the "To Do" lane until they are further decomposed into actionable user stories.
- **Tasks:** Broken down from user stories, ready to be assigned to team members.
- **Bugs:** High-priority bugs that need to be addressed immediately.
- Waiting for complete acceptance criteria, test cases, security cover

Ready to be tested lane

- Epics, User stories, and acceptance criteria read to be tested by your mentors

Done - This lane documents completed work:

Completed user stories: User stories that have been fully implemented, tested, and accepted according to the defined acceptance criteria.
Completed tasks: Individual tasks that have been completed and verified as meeting the defined acceptance criteria.
Resolved bugs: Bugs that have been identified, fixed, and tested, ensuring the issue is no longer present

Your Leankit should demonstrate at least basic understanding of:

- There is an expectation of at least 7 to 10 Epics for whole project (MOSCOW)
- User stories should be clearly defined, concise, and focused on delivering value to the user.
- Acceptance criteria for each user story must be specific, measurable, achievable, relevant, and time-bound (SMART), providing clear guidelines for testing and acceptance.
- Acceptance criteria for the current iteration are mandatory.
- Proficient analysis / critical evaluation of what is required, matches system requirements
- Acceptance criteria has been written well but not specific enough, or missing some parts.
- Shows some thought of what is required in determining the successful implementation of each component
- Format is generally effective for the intended audience.
- Good understanding of how to effectively leverage the tool for team management and project success by using the Leankit features
- The LeanKit board must be actively maintained and updated throughout each iteration, both during and outside of studio sessions. This requires ongoing refinement of the backlog, active management of the current iteration lane, and timely movement of items to the appropriate lanes.
- Regular updates should be evident, reflecting consistent engagement and collaborative teamwork.

Section C: Project Governance Portfolio

(Refer to Project Governance Portfolio Guidelines)

The Monash teaching staff will review your **Leankit, Project Governance** your **minuted industry mentor communications,** for this Iteration during the Iteration reviews in the studio. (It is expected that most will be in electronic format.) These documents will need to be shared with the Monash staff.

Link to Design folder

Please see PGP Guidelines document for further details on the design artefacts.

Link to Data Governance folder

Please see PGP Guidelines document for further details on the data management plan.

Link to Security Aspects folder

Please see PGP Guidelines document for further details on the security plan and vulnerable assessment report (no vulnerable assessment report for onboarding).

Part 1B. Iteration Proposal Presentation Guidelines

Please refer to the Iteration Proposal Presentation Guidelines. Presentations will be delivered during the studio (class).

Part 2. The Build (software) - The latest version of the system

A web-link to a deployed build for review (**this URL will remain the SAME for all iterations**), or to downloadable executable app files along with any necessary instructions in the report. This build must match what is described in the system analysis and design report, as the build should have been built from this report. Any changes to your system must be reflected as amendments to your original report, including reasons for change.

Iteration reviews will be carried out regularly in the weekly classes during the development of each Iteration and will be used to assess the final implemented Iteration and form part of your iteration marks.

The acceptance criteria defined in your Kanban board (Leankit) will be used ultimately as an acceptance list for each iteration. These acceptance criteria should be used to construct your test cases (listed as additional artifacts in your project governance folder) and to start the development, ensuring that the test cases also cover all eventualities that might arise for each of the acceptance criteria.

Your mentors will be conducting acceptance testing and also reviewing your usability testing videos which will be part of your build grade.

Iteration Build Guidelines

Please also note that build will be cumulative, i.e. will include previous Iteration software.

The latest build (including all iterations up to the end of this iteration) will be uploaded to your production environment on your protected server.

For example, when submitting iteration 1, it will remain in your production environment, unchanged. (No changes made in the production folder). During the next iteration, you will work on your iteration 2 in your development environment until it is complete and ready for review. At that point, you will upload iteration 2 to your production environment, but make sure to keep iteration 1 accessible on your archive environment as well (link)

The build that is presented must be robust. Changes that are suggested in feedback should be changes that will make the use of the system better, both from a functional point of view and an ease of use point of view, not fixes for errors!

- The software (build) part will fail (for example the acceptance testing fails) , should it have errors when viewed by the mentors.
- The software (build) part will fail if it does not match the analysis and design report, user stories and acceptance criteria.

System “Done” out of iteration (the Build)

Following will be viewed in your project governance portfolio and integrity tested by class mentors:

- Current working system - No errors, fit for purpose expected functionality (i.e. size of build, number of functions)
- User experience appropriate;
- Code - orderly and documented;
- Database / Data Scripts
- System/ Maintenance Information: (where necessary) (Inappropriate or unnecessary documentation will lose marks!)
- Use case/ Use case narratives/ Class diagram / Sequence diagrams/ Any other specifications; Data models.
  (if any used. - **do not create just for our purpose**)

Part 3. Retrospective Artefacts / Notes

To be uploaded to your project governance portfolio. Refer to pre-reading resources in Moodle on the expectations of a Retrospective.

The scope of your retrospective is about your team and processes, **it is NOT about your product, or the technology you are using.**

Criteria	HD Excellent Reflects the highest level of performance, beyond what is required	D Good Reflects a mastery of what is required	C Expected Basic understanding and delivery of what is required	P Basic Reflects the beginnings of understanding what is required	N Unacceptable Fails to identify what is required
The Build - Retrospective Artifact Critical Reflection, Insight, Actionable Recommendations	Demonstrates exceptional critical reflection, insightful analysis of the build process, team and behaviour process and actionable recommendations for improvement.	Provides a thorough retrospective analysis of the build process, team and behaviour process with clear and actionable recommendations.	Provides a retrospective analysis of the team and behaviour process, but recommendations may lack depth or actionability.	Retrospective analysis present but may be superficial or lack clear recommendations.	Fails to provide a meaningful retrospective analysis on the build process, team and behaviour processes not in a retrospective format.
Evidence of team collaboration	Evidence of individual notes in the PGP of actively participating in the retrospective process, sharing honest and constructive feedback on individual and team performance. Identified personal strengths and weaknesses in teamwork and collaboration.	Evidence of individual notes in the PGP of participating in the retrospective process, sharing feedback on individual and team performance. Identified personal strengths and weaknesses in teamwork and collaboration.	Evidence of individuals participating in the retrospective process in the PGP, but may have been hesitant to share feedback or identify personal areas for improvement.	Limited evidence in the PGP of participation in the retrospective process. Did not actively share feedback or identify personal areas for improvement. Did not develop an action plan for improving individual teamwork skills.	No evidence of individual notes in the PGP participating in the retrospective.

Part 4. E-portfolio (Mahara)

Your e-portfolio is a professional platform to showcase your project work and demonstrate your learning. You need to ensure your e-portfolio adheres to these guidelines:

- **Narrative and Structure:** Present a well-structured and coherent narrative that clearly articulates the project's objectives, your specific role and contributions, the methodologies used, and the key outcomes achieved. The narrative should be easy to follow and logically organized.
- **Visual Design and Organization**: Employ a professional and visually appealing design that enhances the readability and navigability of your e-portfolio. Information should be logically organized and easy to locate.
- **Communication (Business English)**: Use clear, concise, and professional business English. While minor grammatical or spelling errors may be present, they should not significantly impede the reader's understanding of your work.
- **Multimedia Integration:** Integrate relevant multimedia elements (e.g., images, videos, diagrams, code snippets) to support your narrative, illustrate key concepts, and showcase your work effectively. Multimedia should enhance, not distract from, the overall presentation.
- **Updates and Maintenance**: Update your e-portfolio at key project milestones (e.g., after each iteration, following significant progress) to reflect the project's progress, your ongoing contributions, and the development of your learning. Consistent updates demonstrate engagement and commitment to the project.