

DESN2000 (Computer Engineering) 2026 T2

Design journal (20%)

Last updated: 01.06.2026

Task

A *design journal* serves as a logbook for your design project work. Design journals serve multiple purposes, such as:

- *Creativity and communication*: An aid for inventiveness in the design process and a valuable source to collect material to communicate the design.
- *Legal*: Keeps an official record of information that can be used as evidence in legal disputes, such as intellectual property or safety incidents.
- *Operations*: Tracks the process for convenient monitoring and handover of important information.

It is a place where you can discuss your design ideas, reflect on your experiences, collect research findings and much more. There is no exact way to write a design journal. However, a good rule of thumb on what to include is: *If it is related to your design project work, then it's okay to include it in your journal.*

A long (but non-exhaustive) list of things you could include:

- meeting minutes
- project schedules (i.e. Gantt chart)
- screenshots of your team's planner
- scrum board
- team task assignments
- annotated concept sketches
- desk research findings
- pictures
- case-study analysis
- mind maps
- new design ideas
- figures
- state diagrams tables
- infographics
- referenced screenshots with source links
- results of team discussions

For this assessment, you can primarily focus on the following design problems:

1. **Input & authentication:** How would you design a secure yet practical access flow that minimises unauthorised entry?
2. **Alarm & feedback:** How would you design a notification system that clearly communicates different system states to both users and building staff?
3. **Event scheduling & management interface:** How would you design a simple yet functional management interface that allows non-technical building managers to configure access schedules?
4. **Door & sensor:** How would you use the sensors and motor to implement a direction-aware door mechanism that can balance the safety of people walking through it and security?

The rest of this document provides further instructions and guidance, while Table 1 summarises key assessment details.

Table 1 Summary of crucial assessment details

Type	Individual submission
Submission	Submit through <i>Give</i> (See webCMS for instructions)
Due date	Friday Week 5 – 11:59 PM
Weighting	20%
Marking	Marked by the demonstrator and moderated by coordinators
Late entries	Flat -5% penalty per day

Marking

The assessment will be marked by a course demonstrator and moderated by the course coordinator. The submission is worth 20% of your final grade. Marks and feedback will be returned within two weeks of submission. The marking rubric outlines how your journal will be marked. Please read it and the rest of this guide carefully.

Table 2 Mark distribution.

Component	Marks
1. Input & authentication	20%
2. Alarm & feedback	20%
3. Event scheduling & management interface	20%
4. Door & sensor	20%
5. Project management & teamwork	20%

Your design journal is an individual assessment — while your team will naturally share research, decisions, and outcomes as part of the group project, your journal entries should reflect *your own* thinking, analysis, and reflections. Don't copy your teammates' writing. Additionally, the journal must be an accurate and truthful record of the activities completed each week. It should not be fabricated or compiled retrospectively near the deadline. If there is any suspicion that the journal has been falsified, an interview may be conducted to assess the authenticity of the work and the student's understanding of the content.

Table 3 Marking rubric.

1. Input and authentication 2. Alarm & feedback 3. Event scheduling & management interface 4. Door & sensor					
<p>No relevant evidence or the evidence appears to have been fabricated.</p> <p>Entries show little to no effort made.</p>	<p>Minimal evidence of a design process.</p> <p>Very limited or incomplete sketches, brainstorming, or idea development.</p> <p>Only one design idea is presented with little consideration of alternatives.</p> <p>Minimal or no research into existing solutions.</p> <p>The final design is poorly developed or unrealistic.</p> <p>Design decisions are poorly justified or unclear.</p>	<p>Basic evidence of a design process with limited sketches or planning documentation.</p> <p>A few alternative design ideas are explored.</p> <p>Limited research into existing solutions is provided, with minimal referencing.</p> <p>The final design has some practical considerations, but it may not be fully feasible.</p> <p>Design decisions are briefly explained but lack clear justification or comparison with alternatives.</p>	<p>Good evidence of a design process with some sketches, brainstorming, and development of ideas.</p> <p>More than one design idea is considered, though evaluation may be limited.</p> <p>Adequate research into existing solutions is included with some referencing.</p> <p>The final design is generally practical and feasible.</p> <p>Design decisions are explained with some justification, though reasoning may lack depth or completeness.</p>	<p>Excellent evidence of an iterative design process with clear sketches/drawings, brainstorming, meeting notes and idea development.</p> <p>Excellent evidence that several initial design ideas are considered and evaluated.</p> <p>Strong research into existing solutions is evident with appropriate referencing, and some innovative thinking is demonstrated.</p> <p>The final design is very practical and feasible, with only insignificant issues.</p> <p>Most design decisions are detailed and well justified, with reasoning provided for key alternatives not chosen.</p>	<p>Outstanding evidence of an iterative design process that includes early sketches/drawings, initial brainstorming and meeting notes, and initial idea formulation.</p> <p>Outstanding evidence that multiple initial design ideas have been considered.</p> <p>Excellent research into existing solutions has been done with appropriate referencing, and where there is a gap, innovative solutions have been proposed.</p> <p>The final design is extremely practical and feasible. e.g., it is possible to implement with the available resources.</p> <p>All finalised design decisions are sufficiently detailed and well justified with clear reasoning as to why alternatives are not used.</p>
0	4	8	12	16	20

5. Project Management and Teamwork					
Most weekly journal entries are missing, and entries show little to no effort. They also seem to be a <i>disengaged</i> team member.	Some weekly journal entries are missing. Entries do not include meeting minutes and a project schedule. However, they seem to be making an <i>unsatisfactory</i> contribution to the team.	A relevant journal entry is made at least once a week. Does not include meeting minutes or a project schedule. However, they seem to be making a <i>satisfactory</i> contribution to the team.	Several clear, relevant and well-formatted journal entries are made each week. Includes meeting minutes and a project schedule. They also seem to be making a <i>reasonable</i> contribution to the team.	Numerous clear, relevant and well-formatted journal entries are made each week. Consistently includes meeting minutes, documents their work, and uses a project schedule. They also seem to be making a <i>significant</i> contribution to the team.	Numerous clear, relevant and well-formatted journal entries are made each week. Consistently includes meeting minutes, documents their work, and actively uses a project schedule with contingencies. They also seem to be making an <i>outstanding</i> contribution to the team.
0	4	8	12	16	20

Format

Your journal is an active record of your design work (from research to concept generation). Keep your journal up to date from week 1 to week 5, by collecting, reviewing and visualising your design process.

The report in PDF format is to be submitted by each student on *Give*. Late penalties will be applied as per the course outline policy (flat -5% penalty per day).

Page limit: The main body of the Design Journal is limited to **20 pages**. Note that the length limit excludes the title page and summary, references and appendix.

Guidelines

There is no one *right* way to write a design journal. However, there are some practices you can adopt to improve the overall quality of your journal: have a structure, define and follow a format, use different tools to visualise your process and outcomes.

Structure

It is recommended that you organise your journal entries into the steps of your design journey.

Format

In general, you should avoid large blocks of text. These walls of writing can make it difficult to quickly extract crucial information. Your marker will have a limited time to assess your work, so you should make it easy to digest:

Use headings, paragraphs and dot points to break up your text. You may also format the text to emphasise essential points: bold, coloured or highlighted texts work well. Figures, maps, and graphs are essential for good storytelling and the synthesis of your process.

Figures

Images and photos often communicate design better than text. Consider using these regularly within your design journal. Take screenshots or photographs of your mindmaps, drawing, whiteboards, CAD models, sketches, prototype tests and so on. And then put them in your journal with your comments and reflections.

When you insert a figure, be sure to caption, label and reference it appropriately. For example:

Fig. 1 A picture of a car. Source: picturesofcars.com

Logbook

The journal is an active record of your project work. It is a progressive document that should be actively updated as you work on the project instead of being retrospectively filled in just before the due date. Try to form the habit of keeping the record up to date. The authenticity of this is usually quite apparent to markers.

Referencing

You do not need to use a formal referencing system such as IEEE or Harvard. At a minimum, you should provide a link to the source document. However, when you include other references, you cannot present them as your work (i.e., plagiarise).