

The Journal - Detailed Breakdown

What is the Journal?

The journal is inspired by **Vera Molnár's practice** of documenting algorithmic thinking, artistic decisions, and creative exploration. Molnár, a pioneer of computer art, kept detailed notebooks where she worked out algorithmic processes by hand before having access to computers - developing what she called her "machine imaginaire" (imaginary machine).

Like Molnár's journals ([Part 01](#) | [Part 02](#)), your journal is a **living document** that captures both your technical experiments and artistic thinking throughout the semester.

Format:

- Digital documentation using markdown
- Code experiments and iterations
- Hand-drawn sketches (scanned and embedded)
- Weekly entries documenting your generative art journey

Purpose & Learning Goals

Through consistent journaling, you will develop:

- **Ability to articulate algorithmic thinking** in words, sketches, and code
- **Practice documenting both successes AND failures** - learning happens in the gaps
- **Building a personal visual/technical vocabulary** for discussing generative work
- **Developing critical reflection skills** to analyze your own creative decisions
- **Understanding the creative process** as iterative and experimental

What to Document - Weekly Entry Structure

Each week's journal entry should include these four elements:

a) Exploration & Experimentation

- **Code experiments** - working snippets, failed attempts, variations
- **Visual sketches** - hand-drawn ideas, scanned and embedded in your journal
- **Parameters tested** - what variables did you play with? What ranges did you explore?
- **Technical challenges** - what didn't work? What problems did you encounter?

Example: "This week I experimented with nested loops to create grid patterns. I tried varying the spacing parameter from 10 to 50 pixels and noticed that below 20, the pattern becomes too dense..."

b) Influences & References

- **Artists and artworks** that inspired your work this week
- **Techniques or concepts** from readings, examples, or other sources
- **Links, images, citations** - be specific about what you're referencing
- **Why these references matter** - how do they connect to your exploration?

Example: "Looking at Bridget Riley's op art pieces made me think about how repetition with slight variation creates visual rhythm. I tried to apply this principle using sine waves to modulate my grid spacing..."

c) Algorithmic Thinking

- **Rules and systems** you're developing - what are the "if-then" statements?
- **Parameters and constraints** - what can vary? What stays fixed?
- **How code translates to visual outcomes** - describe the logic
- **Pseudocode or diagrams** - sketch out your thinking process

Example: "My system: For each cell in the grid, if the distance from center is greater than 100, draw a circle, otherwise draw a square. The size is determined by distance % 50..."

d) Critical Reflection

- **What worked?** What surprised you?
- **What didn't work?** Why do you think it failed?
- **Artistic decisions** - why did you choose certain colors, compositions, parameters?
- **Questions that emerged** - what do you want to explore next?
- **Next steps** - where is this heading?

Example: "The random color selection creates chaos, but maybe that's not what I want. Next week I'll explore using a limited color palette or color harmony rules. I'm also curious about how timing/animation could add another dimension..."

Format & Technical Requirements

Location:

- `journal` branch of the course repository
- Keep your journal organized and easy to navigate

File Structure:

- Individual markdown files per week: `week_01.md`, `week_02.md`, etc.
- OR one cumulative file with clear week headers: `journal.md`
- Choose the structure that works best for you

Content Requirements:

- Use markdown formatting for clarity
- Include code snippets using code blocks
- Embed images of sketches/outputs (use relative paths)
- Add links to external references
- **Drawings MUST be scanned/photographed and embedded** - hand sketches are essential!

File Naming & Organization:

```
journal/  
├── week_01.md  
├── week_02.md  
├── images/  
│   ├── sketch_week01_01.jpg  
│   ├── sketch_week01_02.jpg  
│   └── output_week02.png  
└── code/  
    ├── 01/  
    │   ├── embed.html  
    │   └── sketch.js
```


02/

...

Tools & Platforms

You are free to use any tools that support your journaling process. See the [Journaling + JS editors](#) section for recommended platforms and tools.

⚠ Required for submission:

All students must submit their journal to **ILIAS** by the final deadline.

If using GitHub + Markdown (recommended):

- Maintain your journal in the `journal` branch of the course repository
- All drawings must be scanned/photographed and embedded
- Code snippets should be included directly or linked to files in your repo
- **For ILIAS submission:**
 1. Export your entire journal folder as a ZIP file and upload to ILIAS
 2. A document containing the direct link(s) to your online journal

If using an alternative platform (Observable, Notion, etc.):

- You may use alternative platforms for your working process
- **For ILIAS submission:** You must submit BOTH:
 1. A PDF export of your complete journal
 2. A document containing the direct link(s) to your online journal

Submission requirements (all students):

- All weekly entries must be included
- All drawings/sketches must be visible in the submission
- All code snippets and references must be accessible
- Final deadline: Week 14 (see course schedule for exact date)

Workflow suggestions:

- Draft in your preferred markdown editor (VS Code, Obsidian, Typora, etc.)

- Use Observable or OpenProcessing for live experiments, then document in your journal
- Use Are.na or Pinterest for collecting visual references, then cite in your journal
- Sketch on paper, scan/photograph, and embed in your markdown files

Evaluation Criteria for Journal (40% of final grade)

Your journal will be evaluated based on the following criteria:

Consistency & Regularity (25%)

- **Weekly entries** submitted throughout the semester
- **Sustained engagement** - no large gaps in documentation
- **Timely updates** - journal reflects current weekly work

Depth of Documentation (30%)

- **All four elements present** in each entry (exploration, references, algorithmic thinking, reflection)
- **Both technical and artistic aspects** covered
- **Includes drawings/sketches** - visual thinking is essential
- **Code examples** that illustrate your experiments
- **Sufficient detail** - entries go beyond surface-level description

Quality of Reflection (25%)

- **Critical analysis** of your own work - not just description
- **Evidence of learning and iteration** - showing growth over time
- **Articulation of creative decisions** - explaining your "why"
- **Honest assessment** of failures and challenges
- **Thoughtful questions** that drive further exploration

Use of References (20%)

- **Engagement with generative art history** and contemporary practice
- **Proper citations** with links and credits
- **Meaningful connections** between influences and your own work
- **Diverse references** - exploring multiple artists, techniques, concepts

Timeline & Milestones

Week 1 (Lesson 01):

- Journal begins - first entry
- Set up your journal structure in the `journal` branch

Weeks 2-4:

- Weekly documentation becomes routine
- Building your visual and technical vocabulary

Week 5 (Lesson 05 - Reflection / Collect / Prepare):

- **Mid-term journal review**
- Group feedback session on journal entries
- Reflect on documentation practice so far
- Adjust approach for second half of semester

Weeks 6-7:

- Continued weekly documentation
- Integration of techniques from first half

Week 8 or 9:

- **Secondary journal review**
- Individual or peer feedback on documentation progress
- Assessment of iterative development
- Refinement of approach heading into final project

Weeks 10-13:

- Continued weekly documentation
- Focus on final project development

- Integration of multiple techniques

Week 14 (Final Presentations):

- **Final journal entry** reflecting on entire semester journey
- Complete journal submission as part of final deliverables

Examples & Best Practices

Good Journal Entry Structure

Week 3 – Grid Systems & Variation

Exploration

This week I experimented with nested for-loops to create grid patterns. I started with a basic grid of circles, then introduced variation using modulo operations.

[Include code snippet]

[Embed image of sketch]

The challenge was controlling the variation – too much randomness created chaos, too little was boring.

References

- Vera Molnár's "Des(ordre)" series (1974)
- Sol LeWitt's wall drawings with systematic variation
- [Link to specific artwork]

What struck me about Molnár's work is how she uses simple rules to create complex patterns. I wanted to apply this constraint-based approach...

Algorithmic Thinking

My system:

- Create grid of $N \times N$ cells
- For each cell at position (i, j) :

- If $(i + j) \% 3 == 0$, draw filled circle
- Else draw outline only
- Size varies based on distance from center

[Include pseudocode or diagram]

Reflection

The modulo operation created an interesting diagonal pattern I didn't anticipate. This "happy accident" made me realize I should explore more mathematical operations as design tools.

Next week I want to explore:

- Using sine/cosine for organic variation
- Color palettes based on position
- Animation of the grid system

****Questions:**** How can I make the variation feel intentional rather than arbitrary? What role does symmetry play in perceived order?

Common Pitfalls to Avoid

❌ Just posting code without explanation

- The journal is not just a code repository
- Always explain your thinking and decisions

❌ Only documenting successes

- Failed experiments are valuable learning moments
- Document what didn't work and why

❌ No visual documentation

- Drawings and sketches are required
- Images of outputs help track your visual evolution

❌ Vague reflections

- "It looks cool" is not enough
- Dig deeper: Why? What makes it work? What could be better?

❌ Missing references

- Your work exists in context
- Show what inspires and influences you

Tips for Effective Documentation

✅ Document while you work, not after

- Capture your thinking in the moment
- It's easier than trying to remember later

✅ Include failed experiments

- They often lead to the best discoveries
- Show your iterative process

✅ Use visual thinking

- Sketch ideas before coding
- Diagram your algorithmic logic
- Take screenshots of interesting outputs

✅ Be specific

- Instead of "I changed the colors," say "I switched from random RGB to a complementary color scheme using HSB color mode"

✅ Ask questions

- Good journals are full of curiosity
- Write down questions that emerge during exploration

✅ Connect to broader context

- How does your work relate to generative art history?
- What conversations in art/design does it engage with?

Getting Started

1. **Set up your journal branch** in the course repo
2. **Create your first entry** (Week 1) - introduce yourself and your interests in generative art
3. **Establish a weekly routine** - set aside time each week to document
4. **Experiment with format** - find what works for you within the requirements
5. **Review Vera Molnár's journals** for inspiration on visual documentation

Remember: The journal is for YOU first - it's a tool for learning and growth. The evaluation is secondary to the value it provides in developing your practice as a generative artist.