

RECITATION 0.18: flow of the project

Is research just about being smart - or is there more to it? *The truth is, structure, teamwork, and mentorship matter more than you think.*

TAs: Kipngeno Koech, Massa Baali

Prof: Bhiksha Raj

11-785 Intro to Deep Learning

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Why This Matters

Because having a great ideas is just the beginning. **Everyone has ideas!**

Your Grades

course project is worth 25% of your final grade

- 20% - Midterm Report
- 35% - Project Video;
- 5% - Responding to comments on Piazza
- 40% - Project report.

At the start...

- Everyone brings different ideas to the table.

You'll **debate, disagree, and delay**

before settling on just one.

Finding the *right mentor* can feel like guesswork.

Even figuring out *where to start* - which papers to read, what tools to use - feels overwhelming.

📌 **And that's okay.**

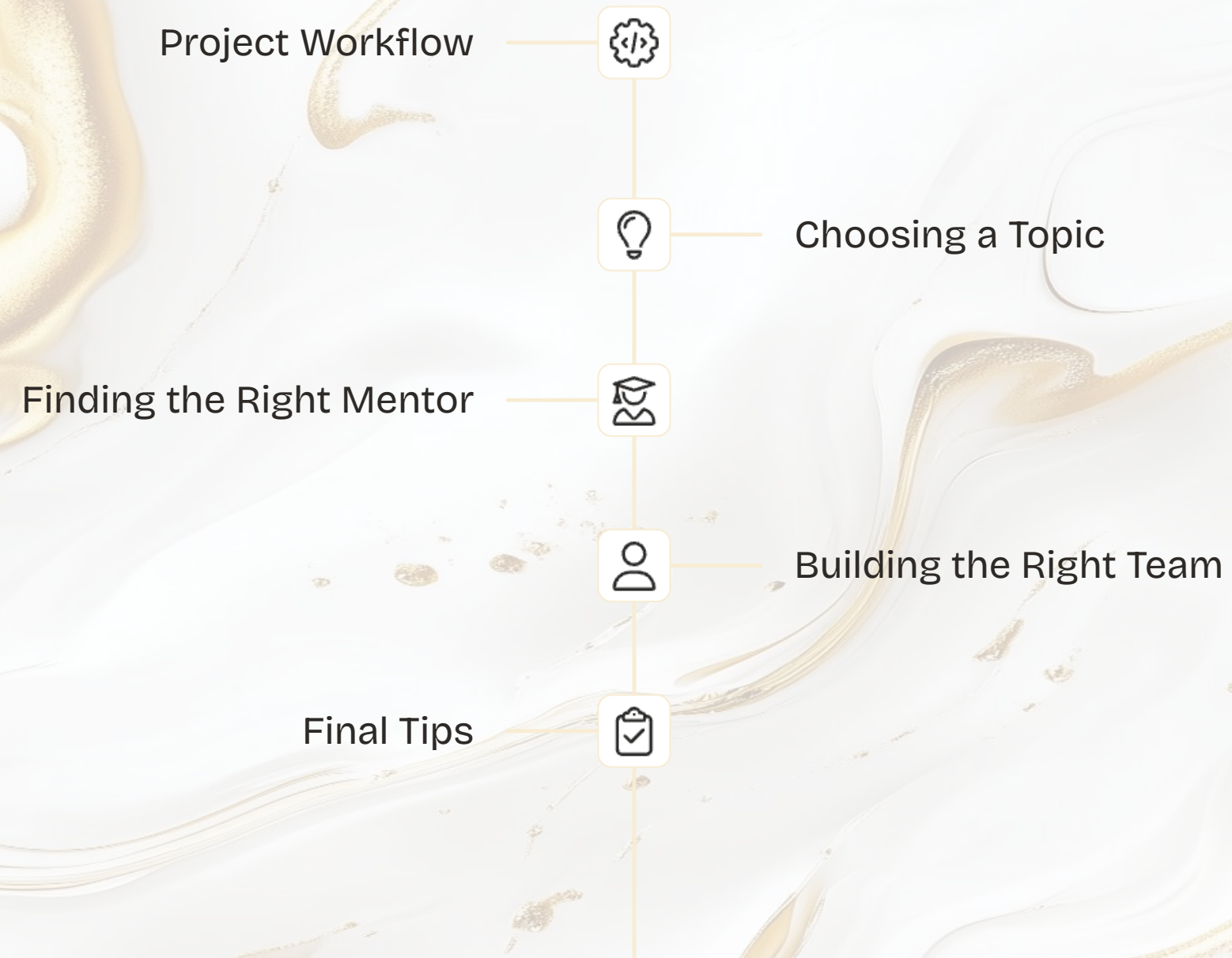
Most projects fail at the beginning - not the end.

And that's exactly what we're here to fix.

N/B: All students taking a graduate version of the course are required to do a course project.

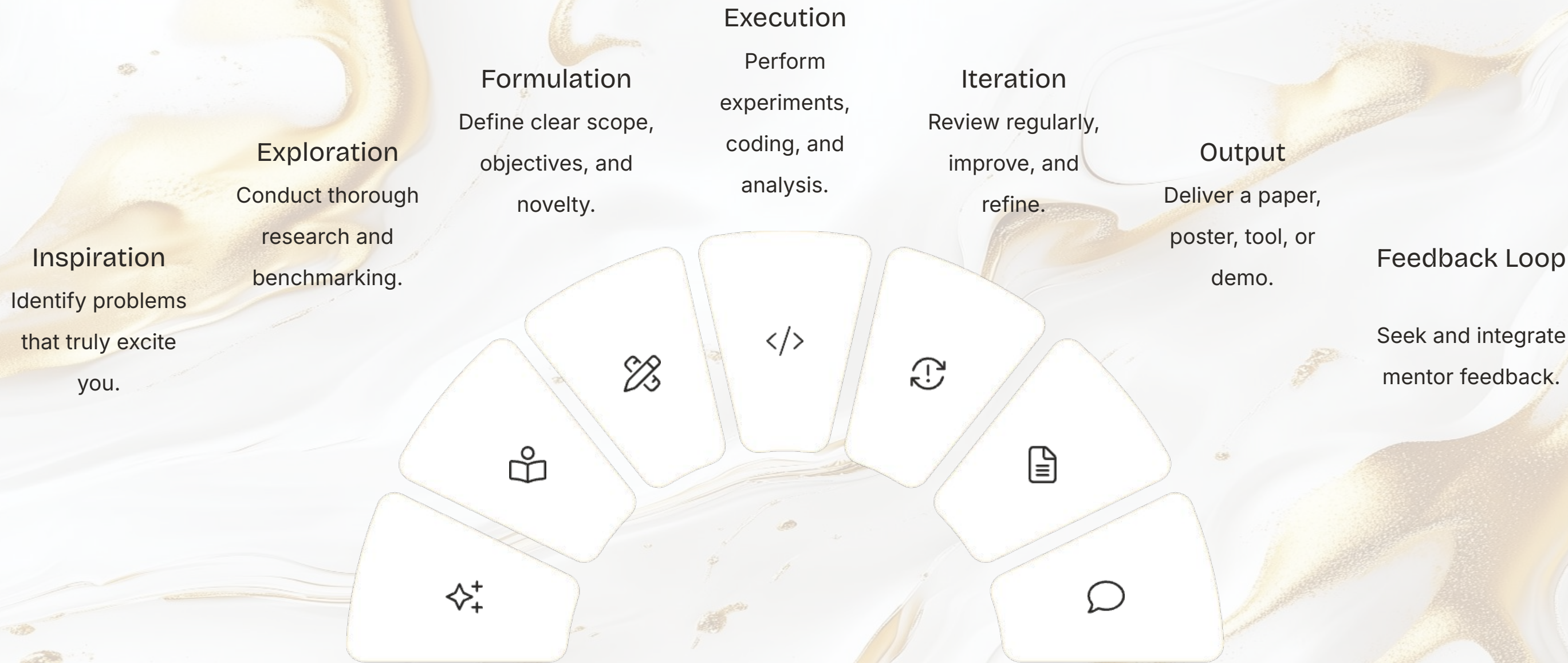


Presentation Overview



The Workflow of a Project

A project follows a structured path from initial idea to final output.



Choosing a Topic That Works for You

Selecting the right topic is crucial for sustained motivation and impact.

Your passion fuels perseverance through challenges.

Consider potential for publication, product development, and societal impact.

Personal Interest

What problems genuinely excite you? Align with your passions.

Impact Potential

Can your work lead to publications, products, or social good?

Market Trends

Review conferences like NeurIPS or ACL for emerging areas.



Defining Your Topic's Potential

Beyond personal interest, assess the tangible outcomes of your topic.

A well-chosen topic offers diverse avenues for contribution.

Strategic alignment with current trends maximizes relevance.

Align with Interests

- What truly drives your curiosity?
- Does it match your work preferences?

Evaluate Potential

- Is publication a viable goal?
- Could it evolve into a product?
- What social or technical impact can it have?

Explore Trends

- review top conferences (NeurIPS, ACL).
- Review recent research papers.

Picking a Mentor

A mentor can significantly shape your research trajectory.

Begin your search early in the semester to secure support.

Thoroughly research potential mentors' backgrounds and successes.

Approach them with a clear intent, idea, and specific request.



Area of Expertise

Does the mentor work in your field of interest?



Availability

Can they dedicate time to guide your project?



Student Engagement

Are they open to undergrad, master's, or PhD projects?



Past Successes

Review their previous students' accomplishments.

Building/Joining a Team

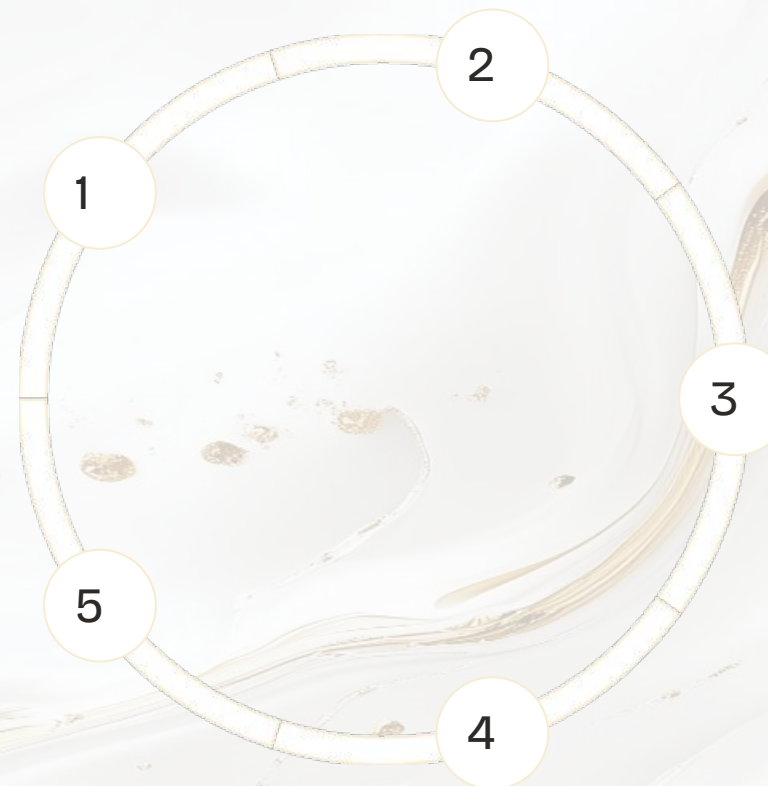
Let me be blunt: a bad team kills more projects than bad ideas ever will. If you want to graduate with a win, your team strategy has to be ruthless.

TEAM INTERESTS

If your team isn't genuinely interested, skilled enough to build, and ready to show up every week - your project is already on **life support!**

Weekly Check-ins

Your project's only as strong as your **last team meeting.**



Transparent Reporting

If you're not openly sharing progress and blockers, you're not collaborating - you're **freelancing** in a group project.

Documentation

No docs, no memory, no accountability - just chaos in a Google Drive!

Joint Literature Review

No lit review? Congrats - you're officially building what already failed in **2016!**

A broken cog stalls the entire machine ~ kip, chatgpt et. al

Effective Collaboration Tips

Treat this like a startup. You don't want four CEOs and no one who knows how to ship!

"We'll all do everything together" is a plan to fail

Closed minds kill projects. If you can't listen, your ideas won't grow, **so is your projects!**

Most projects die because **someone ghosts or misses deadlines** - not because the idea is bad.

Cool ideas without execution? Just **wishful thinking!**

If you're not organized, you're not managing a project - you're managing chaos.

Assign **clear roles** and **own** your tasks.

Flexibility means pivoting when **data** or **feedback** shows you should!

Set internal deadlines and frequent check-ins. Early communication prevents disasters later.

Start building early, iterate fast, and learn from failure.
Execution is king!

Be organized. Pick one place to store your work and communicate - simple, consistent, and everyone knows where to find everything.



Common Pitfalls to Avoid

Being aware of common mistakes can save valuable time and effort.

Proactive planning mitigates risks and keeps your project on track.

Thoughtful mentor and topic selection are foundational for success.

1

Starting Too Late

Delays can severely impact project timelines.

2

Chasing Trends

Focusing solely on trendy ideas without depth.

3

Mentor Mismatch

Choosing a mentor for publications over shared interests.

4

Poor Delegation

Ineffective task distribution within the team.

5. Agendaless Meetings

Brutal Truths

- 🕒 Waste time, drain energy.
- 💭 Endless, decision-less talks.
- 😞 Productive illusion, confusion.
- 🧱 No structure, no accountability.
- 🧟 Weekly repeats: zombie projects.

Ask: **"What decision are we making?"** If no answer, cancel it.

NO AGENDA! NO MEETING! FOCUS ON BLOCKERS! UPDATES! ACTIONS

What To Do Instead

- 📝 Use agendas; no agenda, no meeting.
- 🎯 Assign roles: leader, note-taker, next steps.
- 🚦 Focus on blockers, updates, actions.
- 🔄 End with clear action items, owners, deadlines.
- 🧠 Review changes, don't rehash updates.

Closing Remarks



Plan & Execute

Great projects demand careful planning and relentless execution.



Communicate & Own

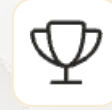
Stay organized, communicate openly, and truly own your role.

Best: Your lovely TA: **kipngeno koech**



Strong Foundations

Choose your topic, team, and mentor wisely from the start.



Your Project, Your Story

Your project is your unique story; make it one worth telling.