



Web and Mobile App Design and Development PDD Program

WMDD 4980 Project 2

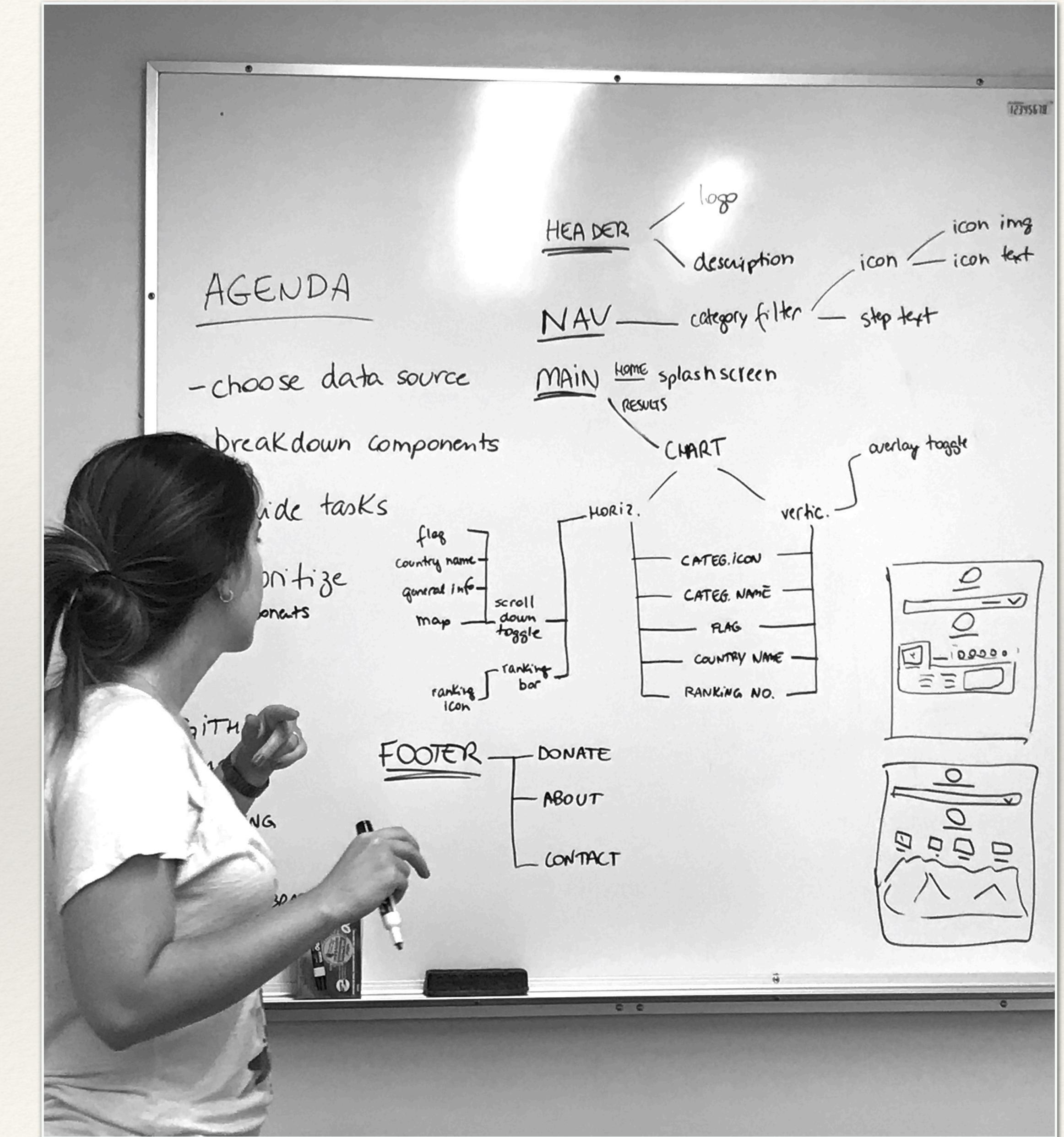
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Course Introduction

Outline

1. Lecture content
2. Project overview
3. Subject and constraints
4. Deliverables
5. Teams



Lecture content

This class has a lecture portion where you will learn industry practices.

Topics covered include:

- ❖ Agile principles
- ❖ Information architecture
- ❖ Good coding practices
- ❖ Accessibility
- ❖ Performance review
- ❖ Continuous Integration (CI)
- ❖ Unit testing
- ❖ Other topic covered by guest speakers

Project Overview

Focus: Project Experience

- ❖ Project 2 helps you learn, experience and develop the skills to prepare you for the industry.
 - ❖ Working as a team that includes both designers and developers
 - ❖ Overcoming design and development obstacles
- ❖ The team succeeds only if;
 - ❖ **everyone** does their part
 - ❖ you are **respectful, honest, and responsible** like you would in the workplace
- ❖ Communication and collaboration is key



Keep in mind

- ❖ This is the TEAM's project, not yours;
- ❖ There is no boss;
- ❖ Your scope must fit within 12 weeks;
- ❖ Things go wrong. Be professional, pragmatic and calm;
- ❖ When you crave for learning, you learn.



Subject and Constraints

Project goal

- ❖ You will design and develop a
 - ❖ data driven;
 - ❖ responsive;
 - ❖ full-stack web application
 - ❖ that provides solution to business
- ❖ You will:
 - ❖ create and update **documentation** from concept to presentation
 - ❖ **manage project** planning and schedule
 - ❖ deliver a working prototype (**MVP**) with working linked **data**

Tech focused, using data

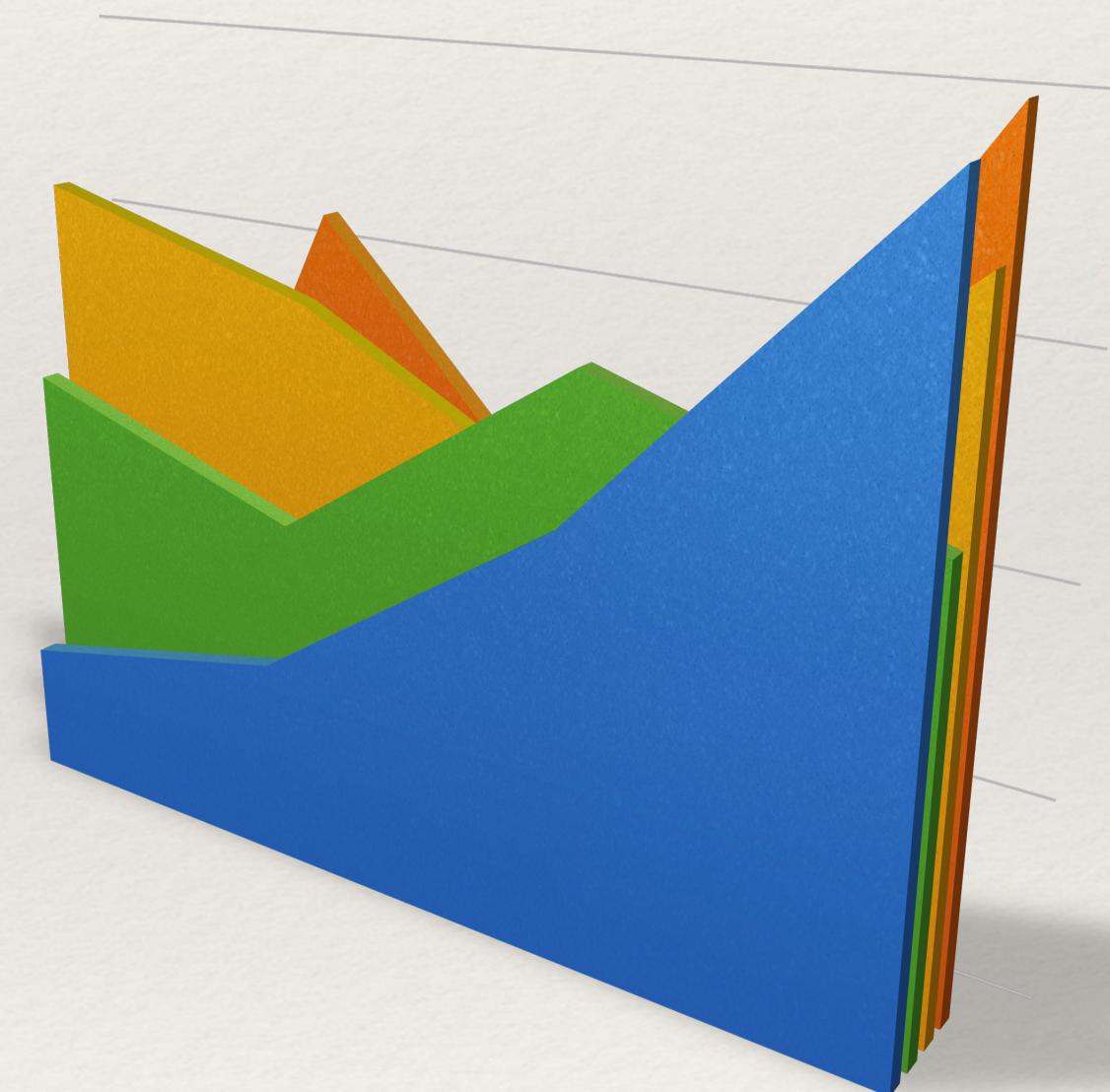
- ❖ Focus on one particular field of tech - MedTech, AgriTech, EduTech, CleanTech and etc.,
- ❖ Utilizing a database, visualization, analytics, solve a problem through technology
- ❖ Visualize, utilize or respond with data sets



Industries to consider with data

Nearly every tech-enabled industry can or does use data visualization. How can you make it better?

- ❖ Health (physical, mental or social)
- ❖ Education (awareness, location, distance learning)
- ❖ Agriculture
- ❖ Mining
- ❖ Forestry
- ❖ Communication
- ❖ Retail (all channels)
- ❖ Travel
- ❖ Finance
- ❖ Real Estate



What can't it be

- ❖ Game (gamification is ok, but no video games)
- ❖ Dedicated mobile / tablet application
- ❖ Social media driven
- ❖ Replication of a prior design, real or academic
- ❖ Regurgitated analytics (don't show us Google analytics in charts)

Development requirements

- ❖ Front-end Javascript SPA Framework (React.js, Vue.js, Angular.js)
- ❖ Custom API with a database (MySQL, MongoDB etc.,)
- ❖ Back-end (Node.js, Express.js and etc.,)

Deliverables

Deliverables

- ❖ Complete UX flow, wireframe documentation with annotations
- ❖ Full UI development ready kit
- ❖ Print-ready summary, promotional materials
- ❖ MVP Demo
- ❖ Development requirements:
 - ❖ Front-end Javascript SPA Framework (React.js, Vue.js, Angular.js)
 - ❖ Custom API with a database (MySQL, MongoDB etc.,)
 - ❖ Back-end (Node.js, Express.js and etc.,)

Schedule

- ❖ Week 1: Team list, Project ideas
- ❖ Week 2: Lean Canvas, User flow, IA, System Architecture
- ❖ Week 3: Wireframe, data model, development milestone criteria, Git initiation
- ❖ Week 4: Revised UX work,
- ❖ Week 5: Branding (Logo, UI kit), Backend configuration
- ❖ Week 6: Mockups, UI prototype, RAID system
- ❖ Week 8: Social media assets, Burndown chart
- ❖ Week 9: Alpha milestone, Project summary draft
- ❖ Week 10: Project summary
- ❖ Week 11: Beta milestone, code complete, presentation script
- ❖ Week 12: RAID report
- ❖ Week 13: Launch, Presentation, post-mortem

Sprint review

- ❖ Every week, each team will present what the team has done in the past sprint in a quick (max 5 minutes) live demo format
 - ❖ Show completed items in the project management dashboard;
 - ❖ Show the outcome of the sprint;
 - ❖ Other teams will give feedback pretending to be a stakeholder

Teams

Teams

- ❖ Every team needs to have a balanced number of developers and designers
- ❖ Features will scale based on members and skillset
- ❖ If your team cannot work together, communicate or collaborate, I will join your team conversation. This is not ideal.
- ❖ Everyone will pull their weight.
- ❖ You do not switch teams during the term.

In Week 1

Find a B2B problem

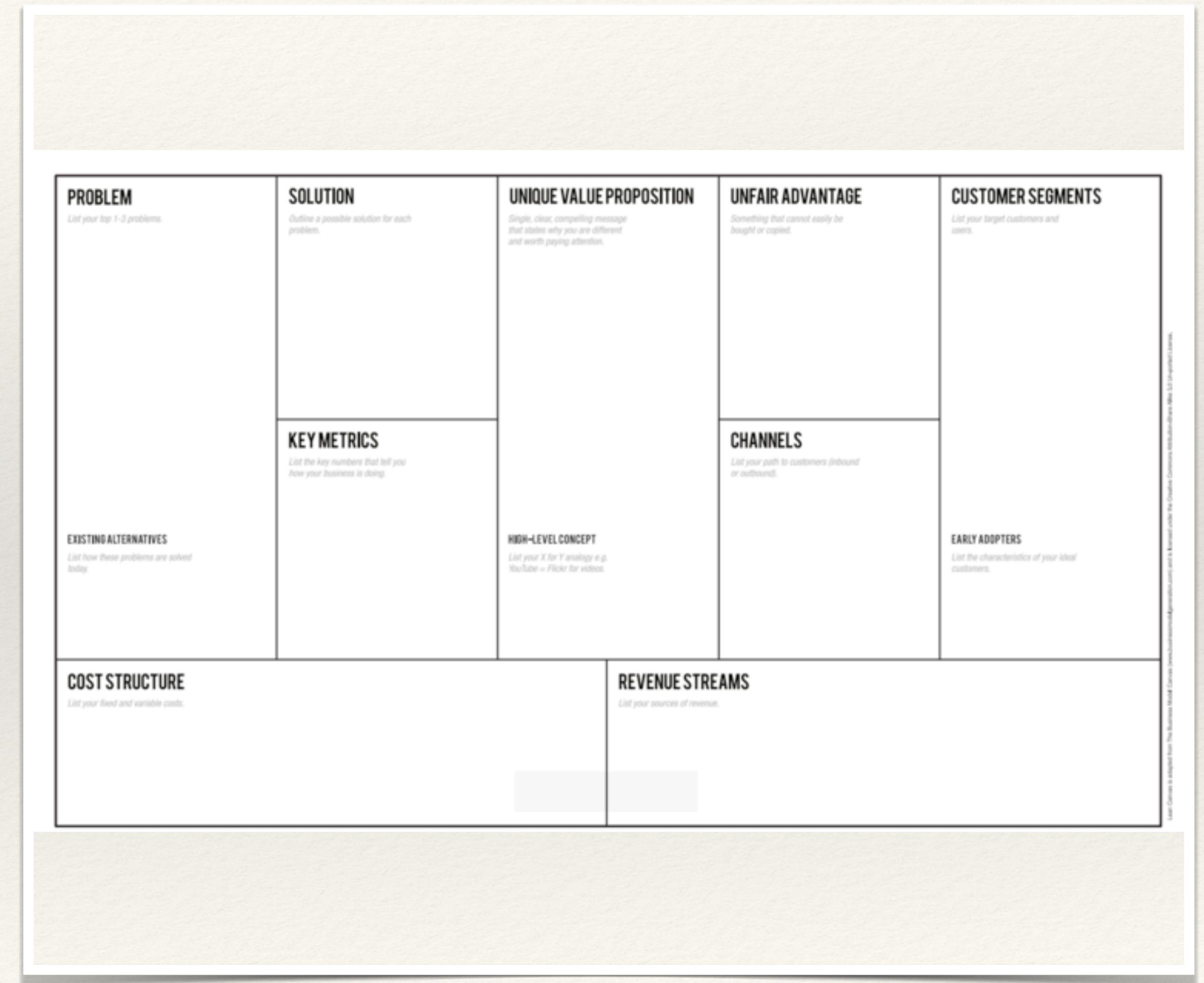
- ❖ Limiting the scope to B2B means:
 - ❖ solving problems you don't often expect;
 - ❖ research and work together to find creative solutions;
 - ❖ take on more challenges to push your skills;
 - ❖ and it makes you more attractive to future employer.

Research, research, research!

- ❖ What is a routine problem someone faces frequently?
- ❖ Who around me can I interview?
- ❖ Is there a third-party database / data source to utilize or fetch the data from?
- ❖ What can you show that correlates with the data source
- ❖ Monetization, compulsion loop, business case

Lean Canvas

- ❖ Lean Canvas helps you determine the viability of the project
- ❖ Use the Lean Canvas template to facilitate choosing the right project
- ❖ What is Lean Canvas? <https://isaacjeffries.com/blog/2020/9/23/how-to-fill-in-a-lean-canvas>
- ❖ Discuss and fill out (most sections of) Lean Canvas for your top 3 projects in Week 1. Share it with me for feedback.
- ❖ Refine and fill out the detail on the Canvas for your picked project in Week 2



Business Proposal

- ❖ Writing a business proposal or executive summary will:
 - ❖ help you to fill what is missing in the project
 - ❖ help you to determine your value proposition that will produce a result
 - ❖ help others determine the potentials of the project and decide if they want to play a part in it
- ❖ Try writing at least one or two sentences in each section for this project to understand the importance of business plan in week 1. Share it with me for feedback.

Project kick-off

- ❖ Hold a kick-off meeting
 - ❖ Decide the weekly meeting time
 - ❖ Decide on roles
 - ❖ Agree on goals
- ❖ Set up project management dashboard - Asana or Trello is recommended
 - ❖ Spring planning for the first week
 - ❖ Start the sprint!