CS 398: Application Development

Week 02 Lecture: Planning

Project planning

Agenda

Today

1. Forming teams
   - channels are setup now
   - if you don't have a team, post on Piazza or email me!
2. Agenda for the week - review website.
3. Review Planning & Project Plan template.
4. Review project specification.
5. Breakout rooms!

20 mins. Go!

This Week

Week 2: Planning & Requirements

Main Goal: Determine project plan and requirements.

Mon: Planning

- Before Class: planning video, slides (notes)
- Lecture: slides
- Activities: Create a simple project plan.
  1. Meet with your team on your MS Team chan[...]
     minutes in your GitLab project[...]
  2. Put together a simple **pr**[...]
     few weeks.
- Resources:
  - Software Specification

Wed: Software Requirements

- Before Class: requirements video, slides (notes)
- Lecture: slides
- Activities: D[...] [softw]are requirements
  - [...]cification.
  - [...]am
  - Interaction Design Foundation. 2021. **Personas – A Simple Introduction**.
    https://www.interaction-design.org/literature/article/personas-why-and-how-y[...]
  - Nielsen Norman Group. 2018. **Affinity Diagramming for Collaboratively S**[...]
    https://www.nngroup.com/articles/affinity-diagram/

https://student.cs.uwaterloo.ca/
~cs398/01-syllabus/1-weekly-schedule/
#week-2-planning--requirements

4

Planning Review
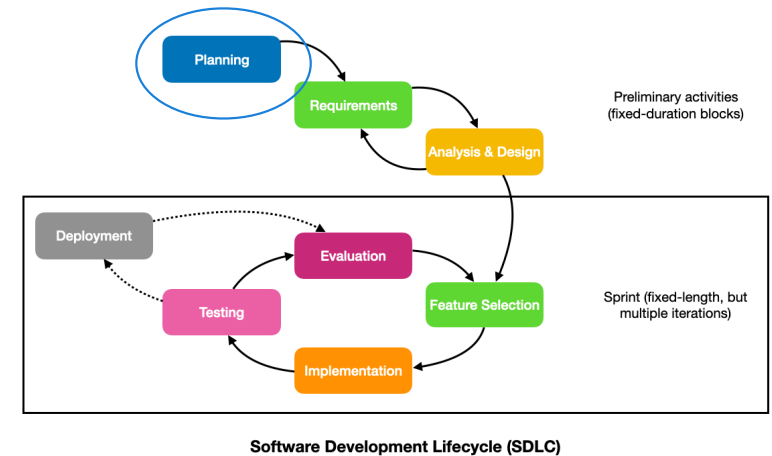
Phase 1: Project Planning

Planning is the set of activities related to the structure and management of our software project.

- Identifying **project goals**, which can include direct goals (e.g. build product x, have something to demo to a customer at the trade show), and indirect goals (e.g. allow Jerry to grow design skills).

- Identifying **resources** (e.g. hardware, software, staff that are available) and **constraints** (e.g. Windows 10).

- **Identifying risks to your project**, and devising a plan to adjust and accommodate these risks.

- Determining an overall schedule, including **milestones** and **time constraints**.

What are we planning on doing?

What are the problems that we might run into?

How can we track this?

Preliminary activities
(fixed-duration blocks)

Sprint (fixed-length, but
multiple iterations)

Software Development Lifecycle (SDLC)

6

Project Plan

You should aim to capture this information in a project plan:

- **Goal**: You want a succinct project statement that captures the purpose of this project. What are you trying to accomplish?

- **Resources**: Identify resources required. Typically this includes an estimate of staff required, plus any additional hardware or software systems that are needed.

  - Required resources: Who is on the project? Do we need any special software or hardware?

  - Constraints. Is someone going on vacation? Can they only work PT?

- **Risks**. What risks can you identify at this stage? These can be technical or non-technical. For every risk, you should identify a mitigation strategy.

- **Schedule**: Finally, you need a list of critical dates and deadlines. e.g. must be able to demo feature X at a conference in October. Must be ready for Demo 1 (whatever that means) on X date.

Project Template

Project Plan

This document lists the sections that you should have in your project plan. Each section has a brief description of the type of information that you should collect.
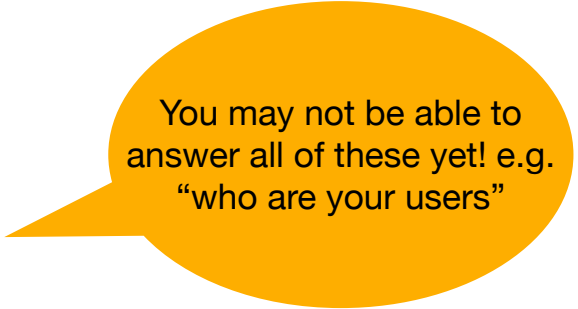
For your project in this course, you should include this in your project Wiki instead of generating a typed document.

Scope

What is the purpose of this project? What is included and not included?

Stakeholders

Who are your critical stakeholders? Who are your users?

You may not be able to answer all of these yet! e.g. "who are your users"

https://student.cs.uwaterloo.ca/~cs398/b-templates/files/project-template.pdf

Project "Specification"
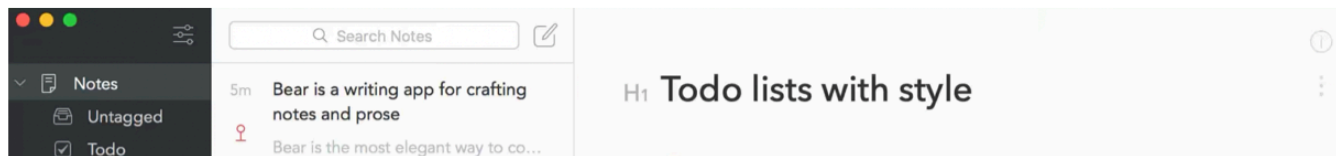
syllabus • project

PROJECT SPECIFICATION

Notes Application

A note-taking application is a standalone application designed for recording and searching short, ad-hoc notes. Typically they are used by people as a non-formal way of organizing information for their own consumption e.g. storing recipes, journalling, or managing a TODO list. What makes this tuler of application different from other writing applications in that it's optimized for a reviewing and searching a collection of content all of the

https://student.cs.uwaterloo.ca/~cs398/01-syllabus/private/project-specification/

Some commercial examples are: Bear (iOS and macOS), Microsoft OneNote (Windows, macOS, iOS, Android). These represent very different designs for this particular style of application. Bear uses Markdown, and is optimized for speed and ease-of-use; OneNote is optimized for creating multi-format notes containing floating images and other content. These are both valid, but different, interpretations of how to address this particular design space.

Noto (macOS)

For "homework" review the spec, and visit the webpages of similar apps to get some ideas of the design space.
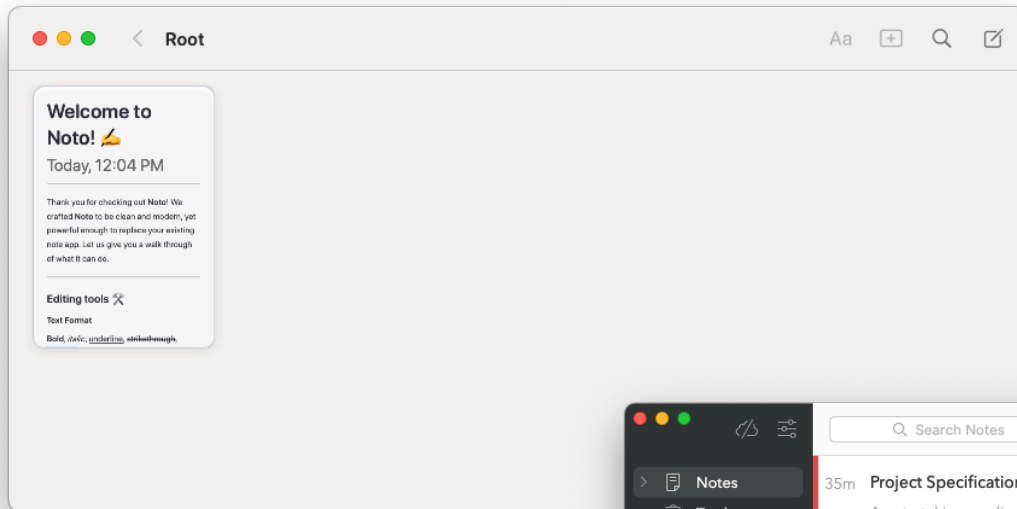
Bear (macOS)

H1 **Project Specification**

A note-taking application is a standalone application designed for recording and searching short, ad-hoc notes. Typically they are used by people as a non-formal way of organizing information for their own consumption e.g. storing recipes, journalling, or managing a TODO list. What makes this style of application different from other writing applications is that it's optimized for organizing and searching a collection of notes: all of the notes are contained and managed within this single application. Organization is often aided through the creative use of folder or tags.

Some commercial examples are: [Bear](🔗) (iOS and macOS), [Microsoft OneNote](🔗) (Windows, macOS, iOS, Android). These represent very different designs for this particular style of application. Bear uses Markdown, and is optimized for speed and ease-of-use; OneNote is optimized for creating multi-format notes containing floating images and other content. These are both valid, but different, interpretations of how to address this particular design space.
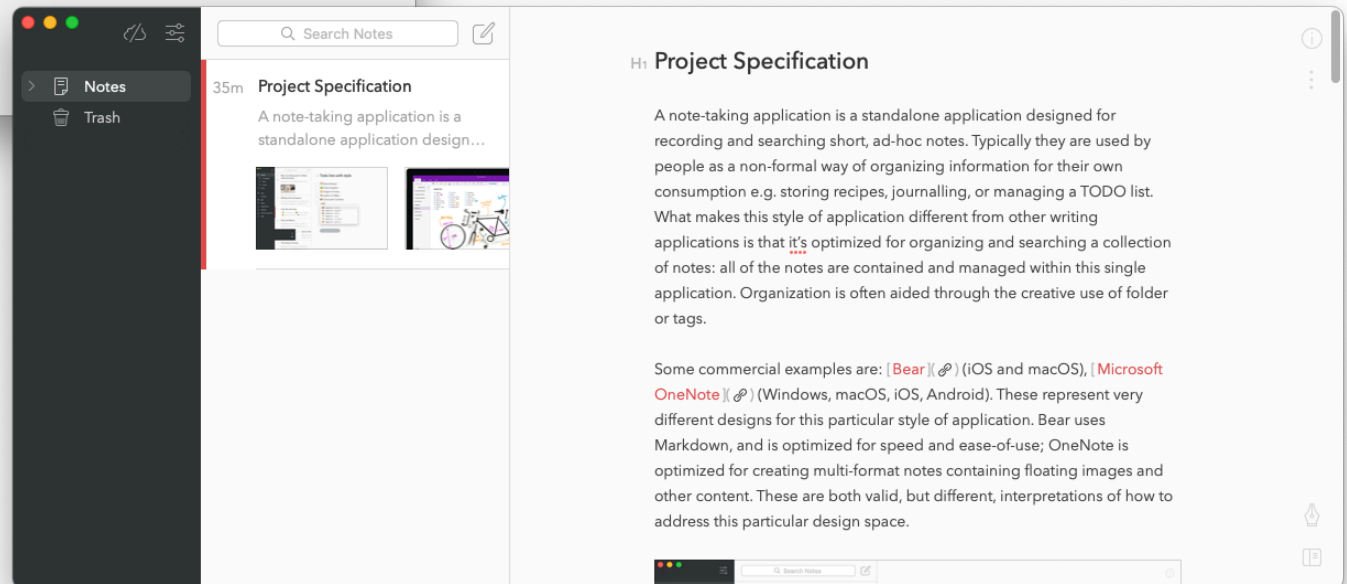
Breakout Sessions

Breakout!

- Start a meeting in your team channel!
  - Take Meeting Minutes for every meeting that you have (i.e. every class, plus any other times).
    - See the course website for a template https://student.cs.uwaterloo.ca/~cs398/b-templates/
    - Store these in your Git repo under a folder **meeting-minutes**
    - You do NOT need to use my PDF, but you do need to include the same information in your document (e.g. you store minutes in a text file if you want).
  - Work on your project plan
    - Idea: use the MS Teams Whiteboard to brainstorm
    - Idea: someone can share the document and edit it for the team
  - If you need help, post a message in the LEC 001 Morning or LEC 002 Afternoon channels with your Team Number and we will join your channel.