Lecture 7: November 15

Alpha Presentation & Demo, Project Review, Writing 4

Agenda

- Presentation 2 Feedback

- Alpha Milestone

    - Alpha Presentation + Demo

    - Alpha Project Review

- Writing 4: PRDs and Final Technical Design Document
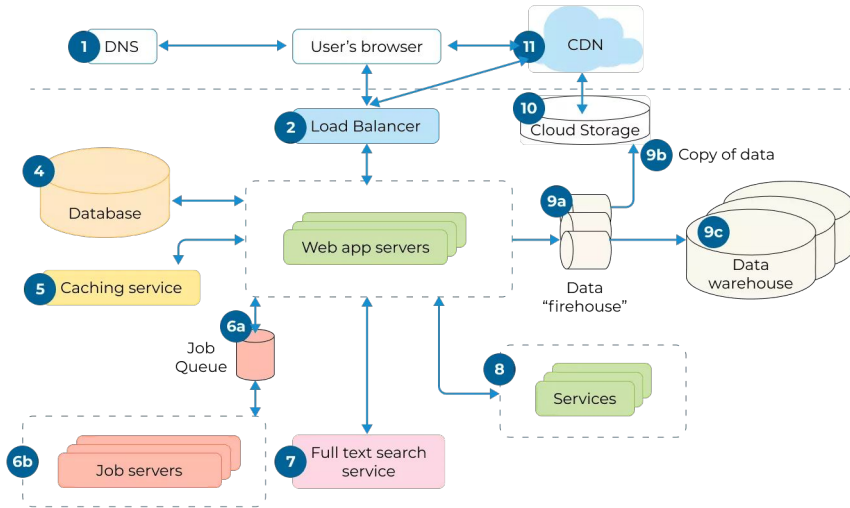
Presentation 2 Feedback

What went well

- Eye contact
- Speaking volume
- Filler words
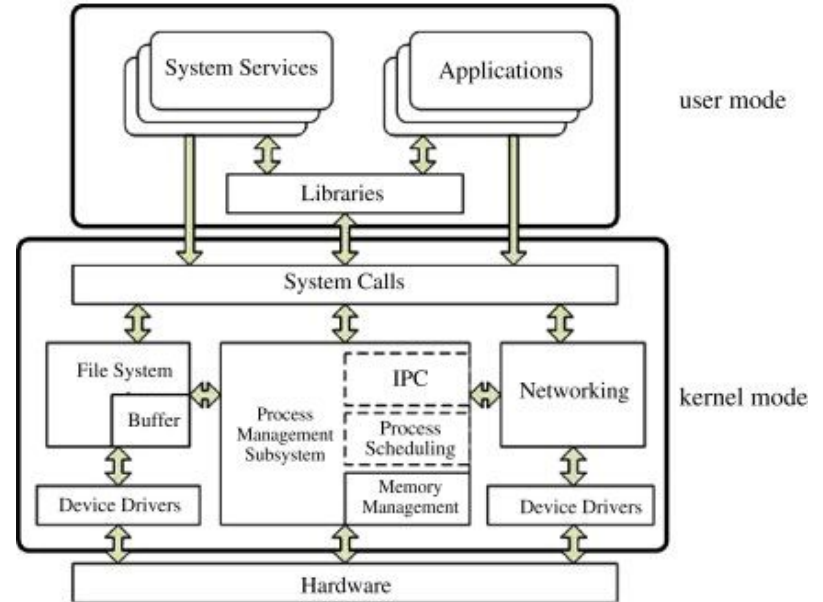- Gestures
- Content

Areas for improvement

- Eye contact - 5 seconds!
- Volume - loud!
- Posture - feet stable
- Speech is rushed
- Nervous fidgeting
- Slides are text-heavy
- Unclear scope of alpha vs whole project

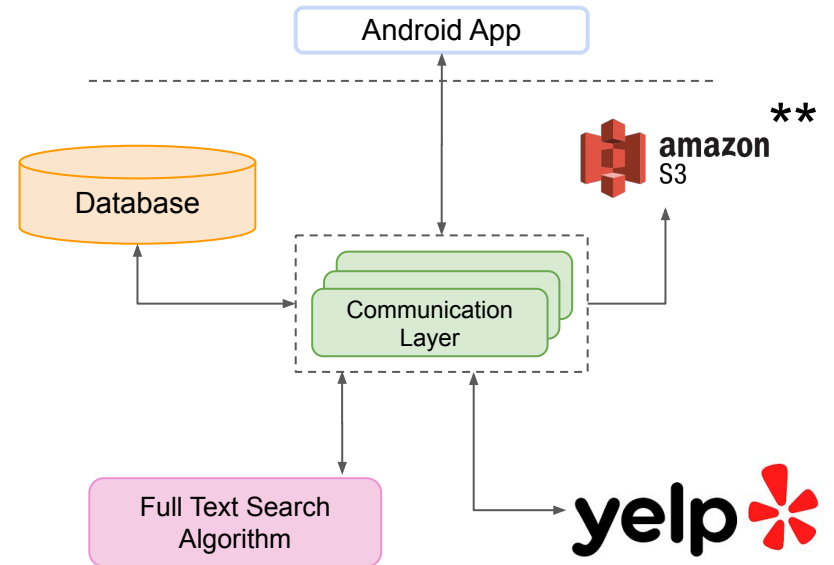# Architecture/System Design

- Diagrams

Web App Architecture

Linux Architecture
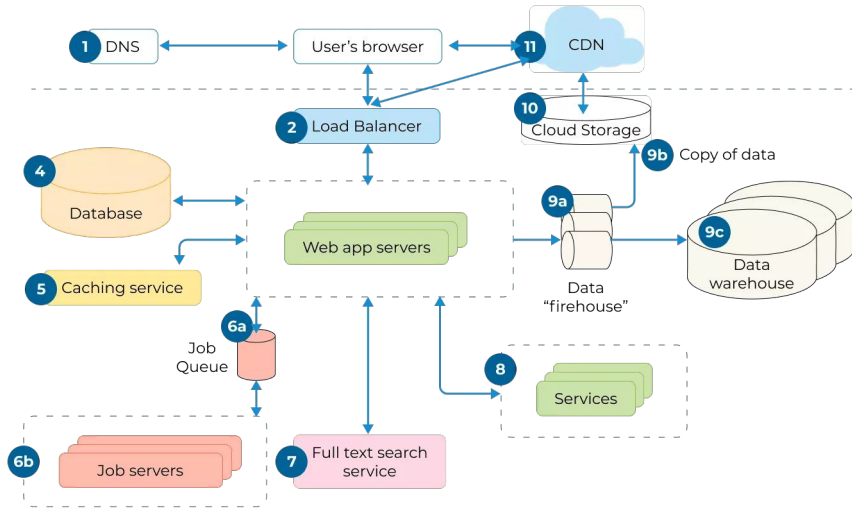
System Diagram - Documentation vs Presentation

**For presentations, logos of the systems can be eye-catching for tech savvy audiences.*

Presentations - Written Word vs Graphics
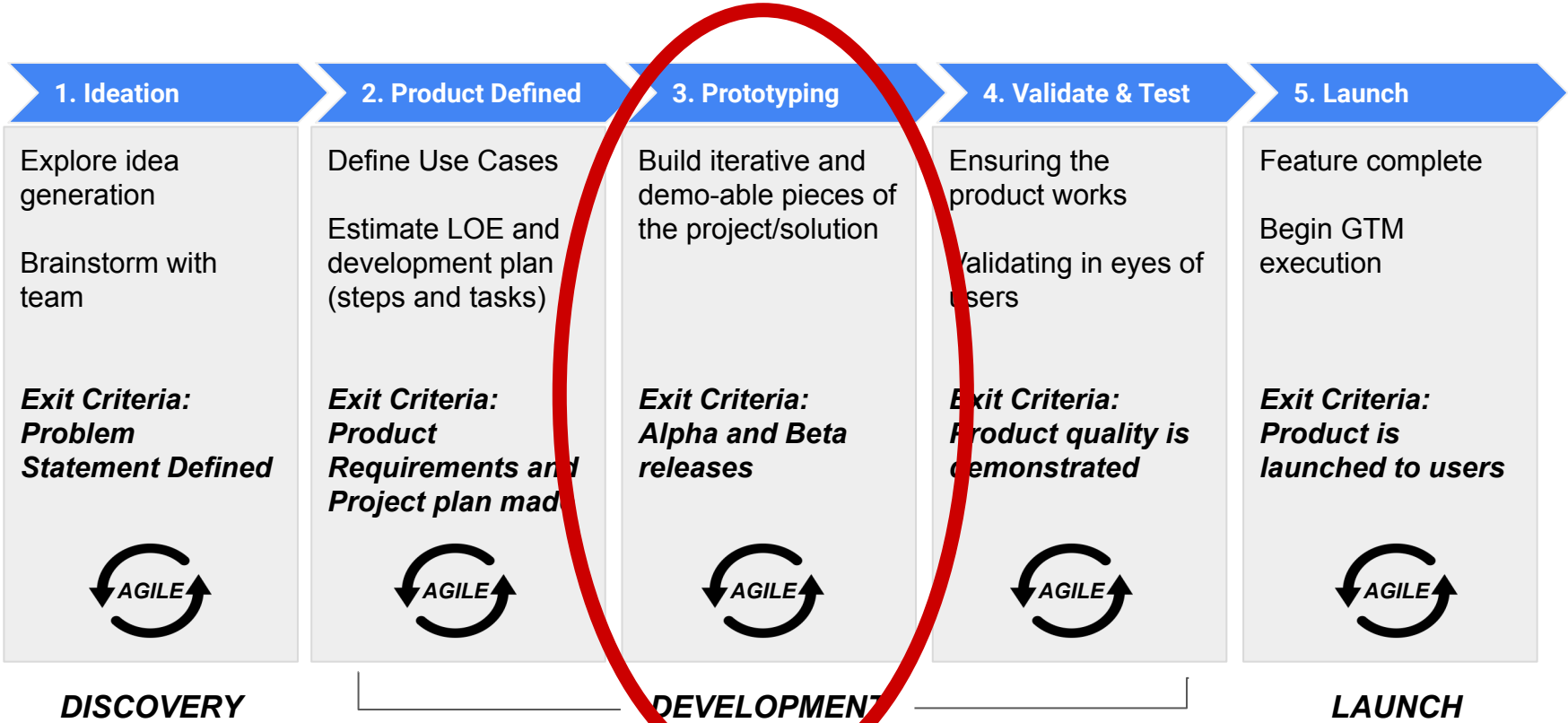
Users

Users

Captures the Moment

Edits the Shots

Users

Photographer: Takes pictures and uploads to the site

Photo Editor: Uses application to edit all the photos taken by the photographer

Product Definition Phase - Alpha Milestone

1. Ideation	2. Product Defined	3. Prototyping	4. Validate & Test	5. Launch
Explore idea generation Brainstorm with team ***Exit Criteria: Problem Statement Defined*** AGILE	Define Use Cases Estimate LOE and development plan (steps and tasks) ***Exit Criteria: Product Requirements and Project plan made*** AGILE	Build iterative and demo-able pieces of the project/solution ***Exit Criteria: Alpha and Beta releases*** AGILE	Ensuring the product works Validating in eyes of users ***Exit Criteria: Product quality is demonstrated*** AGILE	Feature complete Begin GTM execution ***Exit Criteria: Product is launched to users*** AGILE

DISCOVERY   *DEVELOPMENT*   *LAUNCH*

Alpha Milestone

Alpha: First intact piece of code possible for demo

Eg.

- Database is storing data
- Algorithm (or subset of the logic) is running on mock data
- Application architecture (Mobile App, Web App, Hardware, etc) is set up and running
- Application frontend and backend transfer information back and forth
- First use case is working

Not expected:

- App is deployed to app store
- All components are integrated together
- All use cases are met

Alpha Milestone - Deliverables

- Presentation + Demo (12/6)
    - **Audience**: whole class + mentors + instructors
    - **Goal**: present on what was accomplished & demo alpha functionality

- Project Review (week of 12/4)
    - **Audience**: instructors
    - **Goal**: in-depth demo + technical deep dive

Each team member must be able to show the work that they contributed to the Alpha

Presentation Logistics

- 7-8 minutes long
- Can use presentation 2 slides as a starting point
- Presentations on 12/6
- Everyone should be in-person
- Everyone should stay for the full duration (will likely run past 8pm)

Presentation Goals

- Introduce the project to your audience

- Describe technical components and challenges

- Explain the scope of the alpha milestone

- Include a form of demo to illustrate your work (can be pre-recorded)

Presentation Template

INTRO

Problem to be solved

- Key Concepts from Writing 1

Users

- User Personas: 1-2 key users max

Impact

- How is this different from other apps?

TECH

Implementation

- Technical Designs: Diagrams, Algorithms, APIs, etc.
- If using Diagram, use a shortened version with the fewest components max (*No more than 5 is recommended*)

Algorithmic Components

- Explain the algorithmic complexity

DEMO

Alpha Deliverable

- Specify the functionality that's been implemented so far
- Recorded demo or screenshots

Future Work

- What else is remaining? What will you be working on next semester?

Project Review Goals & Logistics

- Week of 12/4 – will use the weekly slot you meet with your instructors
- ~20-30 mins
- Audience: at least 2 of Professor Wood, Professor Qu, and Josh

Goal

- More thorough demo (live if possible)
- Walkthrough of code
- Each team member will explain what they implemented
- Be prepared to answer technical questions
- Plan out demo (how to walk us through the code), but this can be informal

Writing 4: Technical Design Doc

Product Requirements Document

(Pre-work to Development)

Section 1: Proposal

Section 2: Specs

Section 3: Considerations, Constraints, Dependencies

Section 4: Open Questions

Example PRDs

Industry Standard Product Tools and their PRD Templates

Confluence PRD Template

Confluence: Web-based corporate wiki for documentation creation, collaboration, and organization

Coda PRD Template

Coda: All-in-one doc creation and sharing web app. Lower complexity and maturity than Confluence

Aha PRD Template

Aha: Product development software for roadmaps and planning

Product School PRD Template

Product School: Silicon Valley based product management training and certification programs

Product Requirements Document

Section 1: Proposal ...

    Executive Summary - Writing 1 ✅

Section 2: Specs...

    Technical Summary - Writing 2 ✅

    Gantt Chart ✅

    Product Specifications - Writing 3 **(Due Nov 19)**

    Technical Specifications - Writing 3 **(Due Nov 19)**

"Putting it all together" ... Technical Design Document **(Due Dec 14)**

Technical Design Document
(our version of Product Requirements Doc)

Section 1: Proposal…

      Single Executive Summary (Writing 1)

      Technical Summary (Writing 2)

Section 2: Specs…

      Product Specifications (Writing 3)

      Technical Specifications (Writing 3)

Section 3: Alpha Demo…

      Link to code

      Screenshots/Video of Alpha Demo

Writing 4 Logistics

- Due 12/14
- Team submission
- Combine the first 3 writings together into 1 document
    - Edit so it flows (determine which writing 1 & 2 to use)
    - Address feedback from previous assignments
    - If your project changed from the beginning of the semester, you'll need to update the content of writing 1 & 2
- Add final section around alpha demo

Goal: A comprehensive doc describing your project. We'll refer to this as you progress through the Spring semester.

Reminders

Deliverables & Due Dates

- Writing 3 due 11/19
- Alpha presentation + demo due 12/6
- Alpha project review w/ instructors week of 12/4, here's the schedule
- Writing 4 due 12/14 (please focus on this last!)

Upcoming Classes

- 11/22: No lab; thanksgiving break
- 11/28: Alumni job panel (bring questions!)