

Recitation 10: Final Project Tips

Team Workflows + Websockets

last recitation :')

Agenda

 Advice for team workflows

 Project idea tips

 WebSocket example

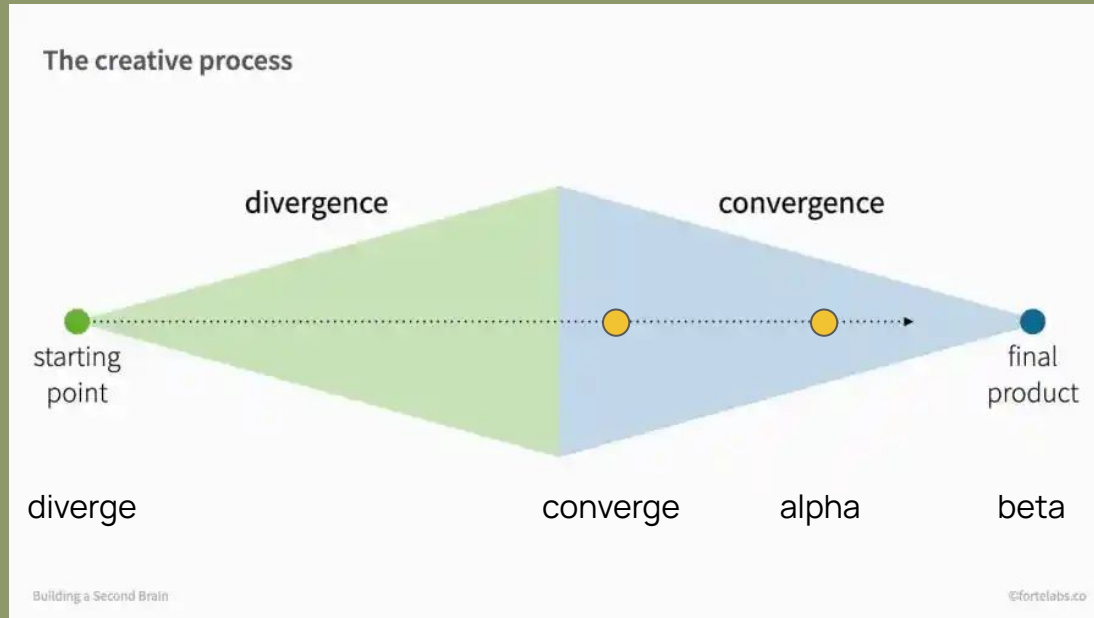
 Programming Resources

Splitting Workload

- Team Contract 🤝
- Each member:
 - 1) roughly the same amount of work
 - **2) must participate in all software development activities**
 - Designing 🖼️, coding 👩‍💻, pitching 🗣️, etc.

Splitting Workload

- Design first! Remember **diverge** → **converge** framework. Iterate as you go.
 - Collaborative design at every stage



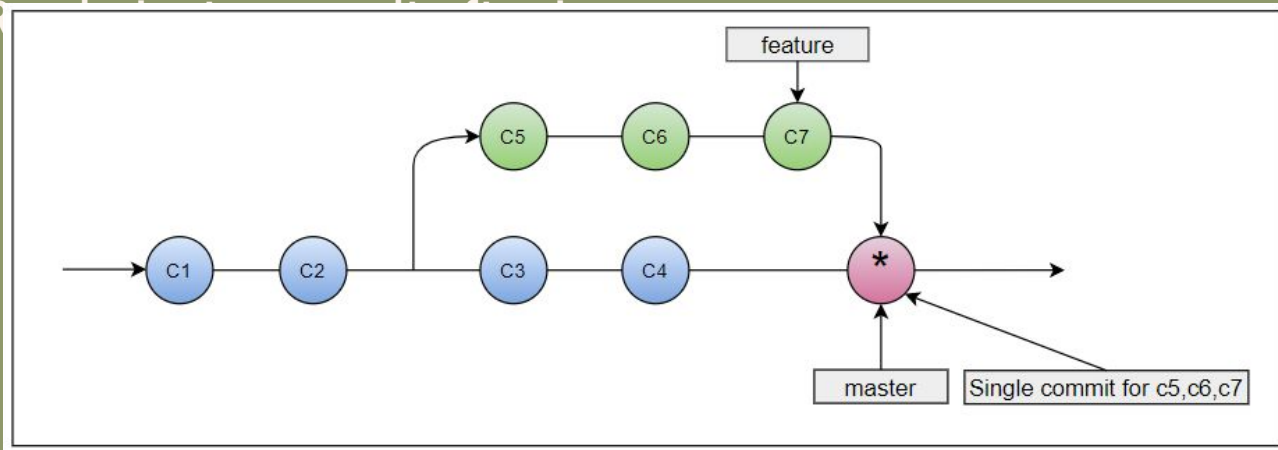
Team Dynamics

- **Have internal soft deadlines for smaller deliverables**
 - avoid empty page syndrome (esp for alpha + beta)
- **Have one person be sort of a project manager**
- **Schedule recurring team meetings**
 - 1) Synchronous meetings - check in and plan for next steps + mentor meetings
 - 2) Work sessions - pair program/debugging ([VSCode liveshare](#))
- **Possibly use project tracker system (Google doc, asana, jira, etc.)**
 - Things often take longer than expected
- **Maybe have each person to be in charge of implementing a concept**

Git workflows

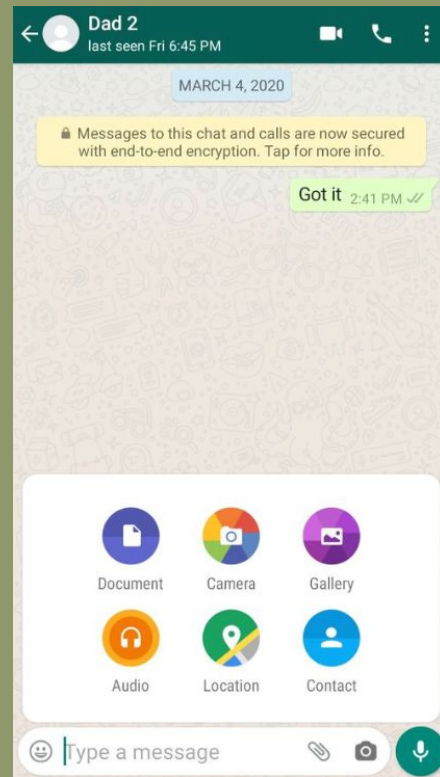
- Working in feature branches - Git Branches
- To merge your work into the main branch - Squash-Rebase-Workflow
 - you can create pull requests and review each other's code

- R



Deployment

- Deployment Guide
- Using **Vercel** is recommended
 - Create shared vercel + github account for deployment
 - Moira mailing list
- **Heroku** can be more flexible
 - WebSockets (socket.IO) for real time communication



Project Idea Tips

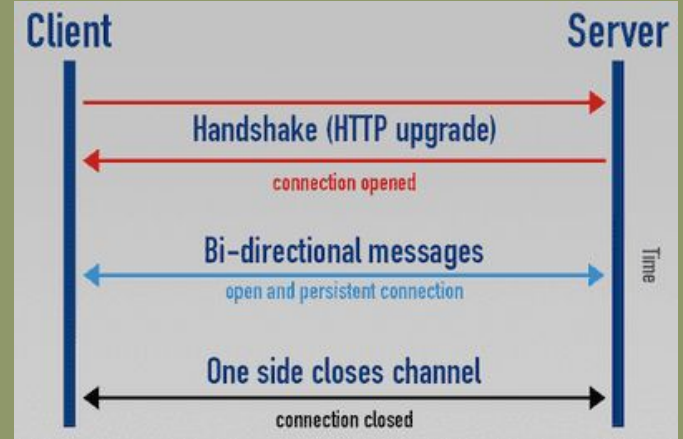
- Do some background research into the problem space.
 - Remember the need-finding lecture?
- Keep in mind authentic apps vs. inauthentic apps
 - Is there a compelling need for your app?
 - Does your project resemble one of the projects we encourage you not to do?
- Remember concept adoption, adjustment, invention (go back to A2 + A3)



Any Questions?

WebSockets Messaging App

- It is useful for developing real-time application like chat system
- In HTTP, server respond only when the client requested
- In Websocket, server and client can exchange data with much more freedom using the sockets.
- Vercel doesn't support it (Heroku does)



Socket.IO

- Built on top of the WebSocket
- Go through messaging app example:
 - <https://tinyurl.com/final-rec>

Resources

- [Programming Resources for 6.1040 Final Project](#)