Final Project: Deliverables

PHY432 Computational Methods in Physics (2022)

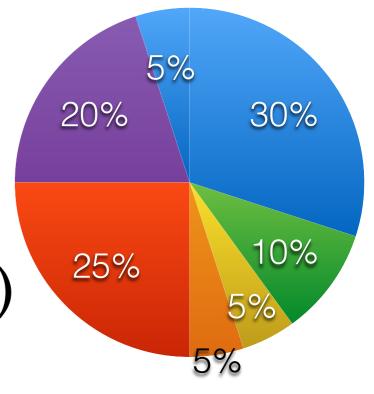
Requirements

- team (2 or 3 students)
- GitHub repository
- keep "lab notebook" on wiki page
- final video presentation
 - abstract as PDF
 - description of contributions (PDF)
 - video (slides + narration): mp4
 - individual Q&A (Zoom)

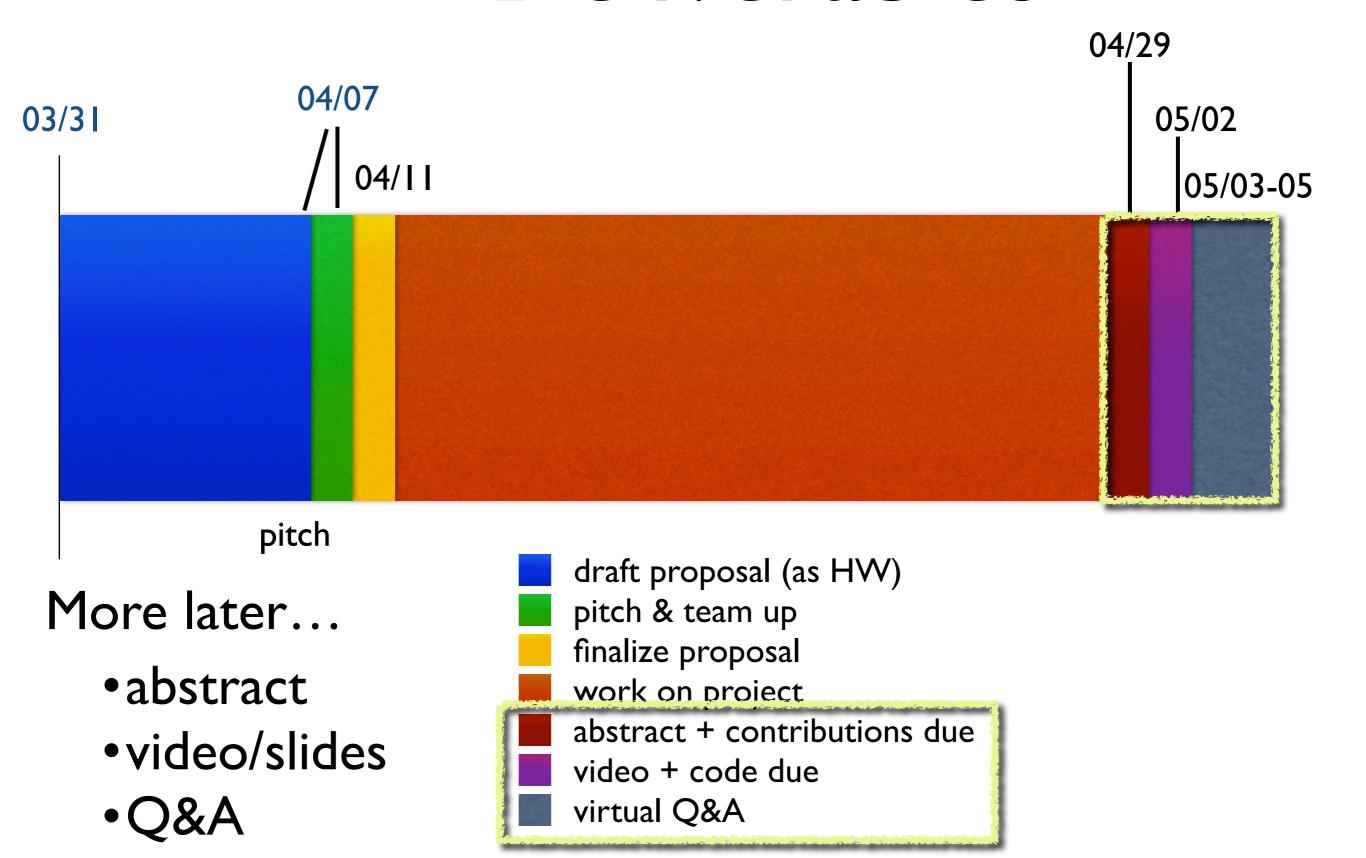
Grading

- individual proposal (HW) (5%)
- code, achieves objectives (30%)
- teamwork (contributions, commits, evidence of communication) (10%)
- keep "lab notebook" on wiki page (5%)
- final video presentation
 - abstract (5%)
 - video (25%)
 - individual Q&A (20%)





Deliverables



Deliverables

- I. submit abstract
- 2. create video presentation (slides, code demo)
- 3. Virtual Final Symposium (videos will be shared with all groups on Canvas)
- 4. individual Q&A via Zoom

Abstract

- I abstract per team
- include title, authors, text
- maximum 200 words
- use the template in docs/ abstract_TEMPLATE.txt and git mv it to abstract/abstract.txt
- due 4/29/2022 I I:59pm (submit through repo)

Abstract

- What was the problem to be solved?
 Background and why is it interesting? What are the major hurdles? What was your goal?
- How did you approach the problem, what methods did you use (keep high level, don't list code or function names)?
- What are the results and what do they mean? Was the goal achieved?
- Conclusions/future work (I sentence)

Abstract

- How to get the code?
 - "Code is available at <GitHub URL>"
- Optional: License your code (see http:// choosealicense.com/):
 - "under the <LICENSE>."

Contributions

- summarize individual team members' contributions in file abstract/CONTRIBUTIONS.txt
- edit the abstract/CONTRIBUTIONS.txt file that's already in the repo
- submit with your code

Presentation

- create slides as if you were to give a talk
- record a presentation
 - use Zoom + record locally (screen share desktop, start presentation & record)
 - or screen-cast-o-matic https://screencast-o-matic.com/ (free version can record, 30-day trial also has a video editor)
- create video in mp4 format
- share with me via Google Drive or Dropbox (I need the file, not a YouTube video link)

Presentation

- maximum 12 minutes length
- minimum 9 minutes
- all team members should contribute
 - making slides
 - narrating (I want to hear the voice of each team member)
- I like seeing your faces but adding face video is optional.

Presentation: Required Slides

- title slide with
 - names of authors
 - name of team
 - repository url
- acknowledgement slide at the end for any help (except me or TA) – if you had outside help

Presentation: Recommended Structure

- I. Title (required)
- 2. **Background (WHY?)**: problem, equations to be solved, motivation
- 3. **Methods (HOW?):** algorithms, parameters, code snippets, flow diagrams, object diagrams, libraries used, ...
- 4. **Results (WHAT?)**: focus on graphs, images, tables, movies: show data (only little text to annotate data)

Presentation: Recommended Structure

- **5. Conclusions**: Summarize the work, what is the take home message? Did you fulfill your objectives?
- **6.** (Acknowledgements) see requirements

Individual Q&A

- Zoom meeting with team
- individual discussion with each team member
 - max. 10 minutes
 - questions about presentation and project
- To be scheduled for 5/03 5/05
- link for sign-up Google Sheet to follow