Milestone 2 Final Report

Indy 2 Vada Project
CS 4850 Section 03
Prof. Sharon Perry
Fall 2022

This project is in collaboration with the Department of History and Philosophy at Kennesaw State University.

Project Team

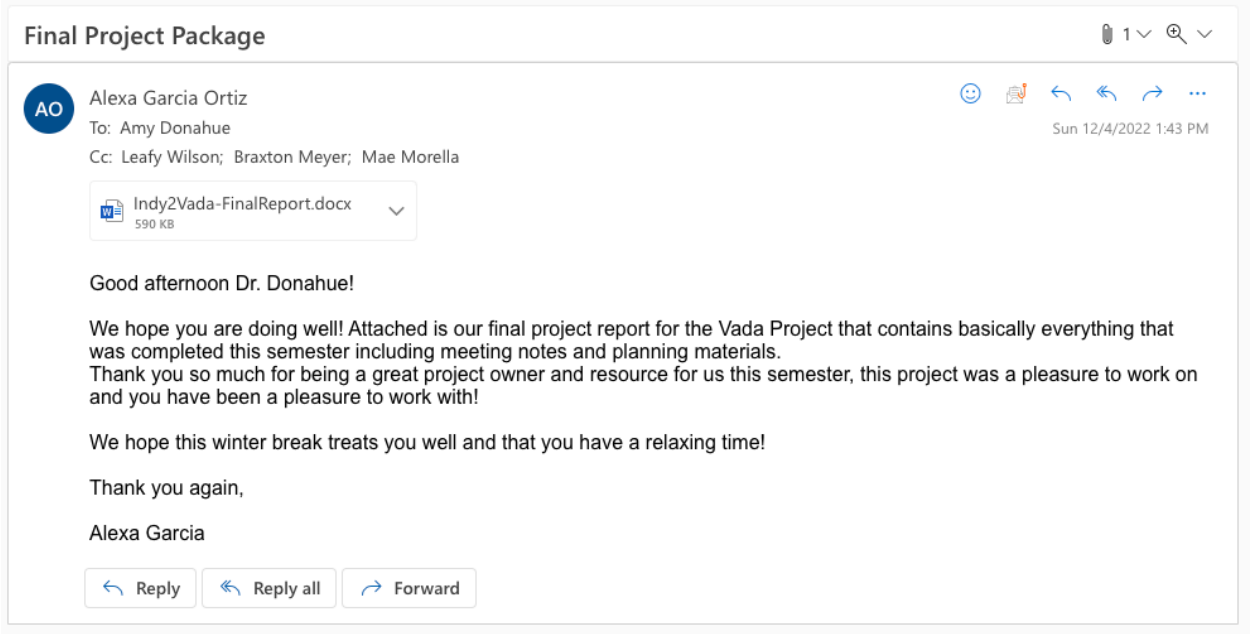
Role	Name	Responsibilities
Project owner	Dr. Amy Donahue	Consulting, requirements, final evaluation
Project manager	Leafy Wilson	Project management, documentation/notes, organizing, *vāda* expert.
Developer	Mae B. Morella	Development, tooling, VCS
	Alexa Garcia	Research, report writing, code management
	Braxton Meyer	Research, report writing, code management
Instructor	Sharon Perry	Facilitate and advise on project management.

Links:

GitHub Repository: https://github.com/VadaProject/application
Project Website: https://vadaproject.github.io/

Correspondence

Screenshot verification of email showing delivery of “Final Report Package”:



Abstract / Overview / Executive Summary

The Vada Project is an upgrade to an existing web application for a collaborative debate platform used to facilitate good faith argumentation and evidence-based reasoning using classical Indian theories of knowledge sources (pramāṇa vada). This web application is designed for classroom use to facilitate critical thinking, debating, and archiving arguments and counterarguments as structured by an Indian philosophical debate style known as Vada. The goals of this project are to design an intuitive and usable interface (HTML+CSS), a stable back-end (PHP+MySQL), and a maintainable codebase managed using static-analysis tools and continuous integration (GitHub Actions).

Table of Contents

Background

The Vada Project began 3 years ago as a solo project between one developer, Leafy Wilson, and Dr. Amy Donahue from the Department of History and Philosophy. Most implementation was done by a single programmer who was self-teaching in the process. There were different levels of functionality that grew with new version releases of the platform.

At this point, the code base, database, and documentation has now been refined and edited by a team of 4 developers (Leafy, Mae, Alexa, and Braxton) to be the current project. The project has benefited from a robust reformatting of the code, restructuring of functions and objects, and given a more functional User Interface in order to be passed on to future developers for future projects.

Tools used to develop the final project package include GitHub, XAMPP, Hostinger, VScode, etc. to implement languages of PHP, SQL, CSS, JavaScript, and HTML.

Results/Findings/Interpretation

The qualities of Vada's merit rely on its systematic logical structure that is both rigorous and also open to natural and intuitive ways of gaining and sharing knowledge. For this reason, implementing a digital platform for Vada to be facilitated is an aid in allowing thoughtful and truth directed debate to flourish in an accessible way. Without

this platform, constructing and reading arguments through Vada is much more challenging and difficult.

Because of the systematic yet flexible nature of the debate, the back-end programming must clearly define certain actions as allowable (creating thesis, supports/evidence, countering or flagging claims) while also allowing for the natural flexibility of debate. The back end allows for constant overhead to check argument validity, which is subject to change depending on evidence and reason supplied at the time of the debate. What resulted from the work this semester in attempting to design an intuitive and usable interface, a stable back-end, and a maintainable codebase managed using static-analysis tools and continuous integration, is a successful product that meets the needs of the Project Manager.

Analysis

The ultimate effect of the project and of the work completed is reflective of the goals begun at the beginning of the semester. These goals involved immersing new developers into the codebase and database of the project, ensuring longevity for the project by creating an application package that can be worked on and improved by future developers, and maintain functionality, create a new front end that prioritizes user acclimation with the platform, and improvement of a stable, maintainable, and readable back-end that follows standard object oriented protocol. With these improvements completed, the Vada Project has the capacity to achieve epistemological and philosophical advancements for classroom learning and increase social awareness around important and pertinent problems in society.

Project website
https://github.com/VadaProject/VadaProject.github.io

Final Deliverables

1. Functional website, deployed and in production
2. Project documentation

Milestone Events (Prototypes, Research, Code Reviews, etc)

1. By October 1, have fully accessible project environment
    a. Uploaded to GitHub, all developers will have shared git environment to push branches to the repository
    b. Each coding environment will use VSCode with extensions that support PHP formatting
2. By November 1, have new user interface implemented
    a. Prototypes for new UI have been developed to condense information that is initially displayed on the page
    b. Users will be able to expand information to view all content on page at once
3. By December 5, have new documentation for future developers
    a. Readme files for entire project
    b. Thorough commenting for all code modules and functions
    c. Functions listed in VadaDocs documentation file
    d. Documentation of tools available to use on project and research done (phptherightway.com)

Meeting Schedule Date/Time

Developers will meet in-person on Tuesday and Thursday at 2:00 PM–3:00 PM.

The team (including Dr. Donahue) will meet remotely Developers will meet every class period and determine ahead of time goals to complete. Meetings with developers and with the project manager will happen every Wednesday at 3 pm.

Collaboration and Communication Plan

Communication and collaboration tools

- Google Drive, GitHub
- GroupMe, Zoom, Discord

Development tools

- XAMPP (Apache/MySQL/PHP), Git, Composer
- Visual Studio Code, GrumPHP
- Hostinger hosting

Project Schedule and Task Planning

See the Gantt chart file attached.

Risk Assessment

This project has few risks, as the base functionality has already been delivered, and all subsequent changes performed this semester are incremental. Nonetheless, the following risks are identified:

- Project management risks
    - Productivity loss caused by communication or organization breakdown
    - Difficulty caused by unfamiliar tools and languages (Git, PHP)
- Social risks
    - Privacy risk if users decide to reveal their identity and position on debate topics
    - Potential harm caused by heated discussion of sensitive topics
- Security risks
    - Potential database security issues (access management, SQL injection)
    - Vulnerabilities may be found in Github hosting on public servers
- Maintainability risks
    - Future developers may find codebase confusing
- Intellectual property risks
    - Copyrighted code may be misused or stolen by bad-faith actors
    - Kennesaw State University may attempt to assert ownership of Dr. Donahue's work

Version Control Plan

High-quality code management and version tracking is essential to the project's longevity.

Version control will be performed using a GitHub repository (github.com/VadaProject/application), utilizing feature branches to maintain a well-documented history of changes to the codebase. README and other documentation will also be hosted within this repository. Static analysis may be performed automatically through GitHub Actions which execute automatically.

Repositories will be managed by a GitHub Organization (github.com/VadaProject), allowing easy transfer of ownership to Dr. Donahue, and future maintainers.

Test Plan

Testing plan will involve Jade as a consultant testing the website with the new changes to make sure functionality hasn't been compromised during the development process. Further, testing with requirements will happen continuously as Dr. Donahue meets with us weekly to

monitor progress and approve of changes happening to prevent loss of functionality to preexisting code.

Improving the overall user experience of the Vada project, to where it is more intuitive to understand than having to read the docs on pramana vada provided. Additionally, we aim to make the experience of navigating different theorem discussions more comfortable.

Requirements

The goal of this project is to create an improved version of the Vada app, to improve its adherence to three critical quality attributes:

- Long-term maintainability
- Usability (UI/UX design)
- Accessibility (mobile support)

Priority 1: Longevity

- Improved code quality (code comments)
- Manual for application maintenance and deployment

Priority 2: Usability

- New mobile-compatible UI for argument diagrams
    - Researching new UI displays
    - New UI frameworks to support new display
    - Conduct meetings with Software Engineer faculty or undergraduates (usability test)
- Group sections

Priority 3: Accessibility

- Semantic HTML, for use with screen readers function
- SSL certificate for HTTPS in-browser.
- Link or video clip embedding

INDY 2

Vada Project 08/20/22

/ 10:00 am /

ATTENDEES

Dr. Amy Donahue, Leafy Wilson, Mae Morella, Braxton Meyers, Alexa Garcia, Jade Flack.

AGENDA

- Begin with introductions, then an overview of the website.
- Goals for the project looks like: planning new language, mobile app/mobile compatible, user design, ... identifying improvements.
    - Dr. Donahue: wants to look into additional cyber security, privacy, user accounts, moderation.
    - A goal may be to look at how to include external sources and videos embedded, like youtube embedding.
    - Goals for front end display might look like vertical/horizontal display and collapsing.. Scrolling in two directions can be a frustrating experience.

- Current plans for platform Using github, google docs, groupme for collab. Zoom for meetings.
    - Password for website : vada Kennesaw1

- Reviewed disquis comments as a feature of “tarka” or open conversation on the website. Debate over desire for anonymity, or use sessions to divide claims and topics and allow privacy.

- Confirmed no need for NDA and consent from Dr. Donahue as project leader. Discussion of making vada an open source software.

- Discussed looking at defining the SDLF (software development life cycle) with guidance from Professor perry.

NEXT STEPS

Meeting at Wednesday, August 24 at 3 pm. In future meetings, using Stack to have inclusive and streamline conversations.

a. For **proposal**: on tuesday, explore github and code structure to brainstorm better code organization. Start Requirements gathering phase, like making improvements to code management, readme files. Define requirements vs deliverables, expectations.

INDY 2

MEETING NAME 8/24/22

/ 3:00 PM /

ATTENDEES

Amy Donahue, Jade Flack, Braxton Meyer, Mae Morella, Leafy Wilson, Alexa Bean Garcia

AGENDA

1. Check-ins
2. Review proposal with A.D.
3. Finalize Scope (propose adding ssl certificate)
4. Establish Next steps (research)

1.

New Business

- Lorem ipsum dolor sit amet, consectetuer adipiscing elit.
- Suspendisse scelerisque mi a mi.

NOTES

Notes:

- Overview of project proposal and solidification of requirements

  Before Next Meeting / Next phase
- Leafy works on Priority 1 Longevity to improve code readability for current developers.
    - Leafy map out what that end goal for code management looks like
- Mae proposed github template for project documentation/ class website
- Alexa indicated conducting research on code changes from tree structure.
- Braxton indicated looking at a maintenance manual for current github structure, researching maintenance manual structure.
    - How can a team develop this?
    - Process of code improvement: improve current code structure, then focus on improvements.

-

Goals:

1. (**This Afternoon**) Allow access for developers in current github (move github/ruthanawilson -> github organization)
    a. Mae begins template for github
    b. Leafy allowing permissions / code merging
2. (**Next Class Period**) Group analysis of current code
    a. Leafy prepare for code presentation
    b. Alexa look for tree-structure alternatives
    c. Braxton coordinate with alexa to convert current code to a new structure
3. (**Future Class Periods**) Finishing project proposal
    a. Begin Gantt Chart (Mae and Leafy will conduct research on effective way to complete this)
        i. List of every task (collective work)
        ii. Apply start/end date
        iii. Google sheets / github project management

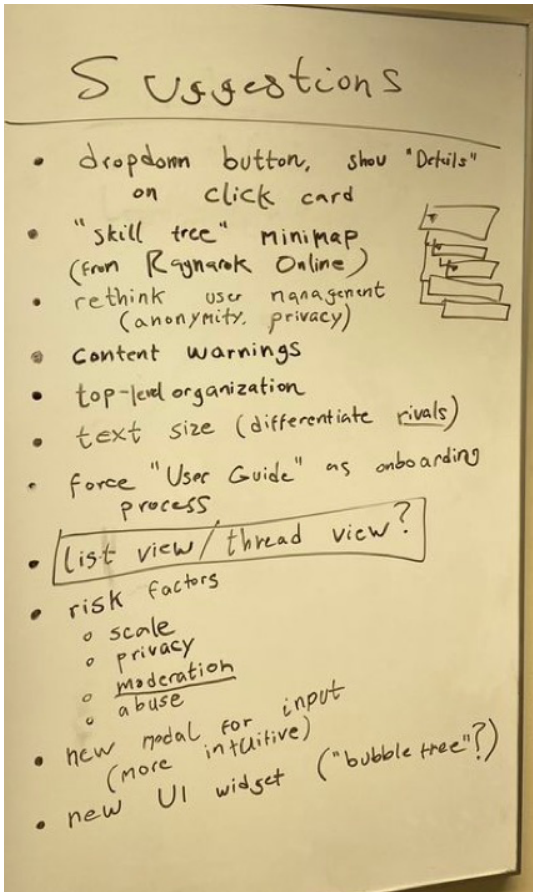
INDY 2

MEETING NAME 08/31/22

/ 3:00 PM /

ATTENDEES

Leafy, Alexa, Braxton, Dr. Amy Donahue



AGENDA

1. Last meeting was unable to meet to discuss code. Instead, we received suggestions from the class on UI improvements.
2. Leafy missed last class, but all other groupmates were present for Intellectual Property lecture (maybe an overview from Mae, who took notes).

Meeting Goals:

1. Go over suggestions from students (listed above in image)
2. Any important notes from IP lecture
3. Gannt chart updates from Professor Perry's suggestions.
4. Check ins on research conducted over the weekend, if any.

Next steps:

1. Continue to overview code from github together (review document leafy made)
2. Double check with Professor Perry about grading requirements

an accordion in bootstrap can be used to achieve this. (Link):
https://getbootstrap.com/docs/5.0/components/accordion/

INDY 2

MEETING NAME 09/07/22

/ 3:00 PM /

ATTENDEES

Leafy, Mae, Alexa, Dr. Amy Donahue

AGENDA

Check-ins/updates

- Initial code walkthrough has been completed! Discussions of reformat and redesign have been started (organize files according to basic functions / rival equivalents)
- Code walkthrough document made
- Localhost instructions and data emailed to all members
- A1 signed and completed
- Sharron Perry gave vague answer on grade requirements/obligations
- IP Overview
    - Who owns copyright / open source licenses?
    - Chris's email is ccornel5@kennesaw.edu
    - Students are completing “work to hire” for third parties
    - Important factor is the capacity for this project to be worked upon at other universities/prevent removal of faculty ownership
    - Students have interest in displaying work in portfolio

ACTION ITEMS

Next Steps

- Leafy will create document for method description (half completed)
- Mae will install "Composer" (apparently dependency manager for PHP), and use that to set up either PHPStan, PHP-CS-Fixer, or Psalm to manage our coding style
- Continue planning for the collapsed tree structure for the UI

- Project Website will be a GitHub Pages blog. The homepage will show our project, and we need a sidebar nav with links to all the different docs we make over the course of the semester. Should be "pleasant to view, easy to navigate, a little bit of panache".
- Gantt chart needs specific requirements

WORKSHOP

Here's the link for the workshop the week after next at VU Amsterdam: https://vu.nl/en/events/2022/world-philosophies-and-traditions-of-knowledge-making. It can be accessed through zoom using this webinar ID and passcode:

Webinar ID: 910 3074 7862
Passcode: 359514

My talk is scheduled for from on Monday, September 19, from 11am-1pm our time (CET is 6 hours ahead of EST).

INDY 2

Vada Project 09/14

/ 3:00 PM /

ATTENDEES

Leafy,

AGENDA

Last Meeting Follow-up

Here's the link for the workshop the week after next at VU Amsterdam: https://vu.nl/en/events/2022/world-philosophies-and-traditions-of-knowledge-making. It can be accessed through zoom using this webinar ID and passcode:

Webinar ID: 910 3074 7862
Passcode: 359514

My talk is scheduled for from on Monday, September 19, from 11am-1pm our time (CET is 6 hours ahead of EST).

New Business

- We still seem to be in the organizing/planning phase.
- The progress made for this week:
- Mae got localhost to work. Reworked HTML and changed PHP formatting and made the first commit to the github page. Professor Perry had no lecture.
- I got VadaDocs to a more thoroughly written stage.
- If everyone has the local host installed, we should begin experimenting with having a collapsable UI. This will take tinkering with the css page.

NOTES

- **Using Pandoc to be able to convert docx files to html.**

- **Composer used to format php. Phpintelliphense formats html as well.**
- **Pandoc to make website updates/edits to userguide could be very useful. Markdown as a markup language.**
- **Leafy recreate prototype for what new ui should look like**
- **Project plan is mostly finished, but focus on any additional information from dr. perry**
- **Use figma and penpot for ui examples.**

ACTION ITEMS

1. **Have all devs get localhost on their computers/establish coding environment. After this, css changes should begin.**

INDY 2

Vada Project 09/21

/ 3:00 PM /

ATTENDEES

Leafy, Alexa, Braxton, Mae

AGENDA

Last Meeting Follow-up

2. Localhost review - how does it work on mac? Are we able to remote desktop into a windows for those that can?
3. Getting Dr. Donahue to sign Project Plan
4. Project plan progress
5. Mae updates on php tools and reformatting
6. Review github page for project

New Business

- Config files and instructions for readme for php Grumphp instantiated by Mae. Script runs php scripts all at once.
    - Grumpphp - https://github.com/VadaProject/application#tooling-and-development
    - https://github.com/VadaProject/application/tree/big-refactor
    - 1. Version control and 2. static analysis and tooling
    - Phpcodesniffer -
    - Nestdetector -
    - Cs fixer

    - Settings files and a tutorial for how to use grump
- A simple and quick document or file to explain tools used and progress made.
- Readme for installing composer and other plugins that aren't automatic from the "recommended" file.

NOTES

- **Now that everyone has localhost installed, we need to install most updated code into our local environments.**
- **Leafy will send project plan to dr. donahue.**
- **Next meeting will be for finishing project plan.**
- **Php the Right Way . com**
- **React client connects to javascript database and backend is redux or gatsby. Focus on not migration but high quality php.**
- **Next.js**
- **Exploring template language or framework for php, such as plates**
- **Listing out all desired requirements, like commenting, function dividing, vadadocs, review of tool changes and research done.**
- **Short vada logic tutorial / lesson at some point**
- **Leafy needs to send a sql file with dummy claims. One with a variety of testimony, perception, and inference and rival claims inside.**
- **https://elm-lang.org/**

INDY 2

Vada Project 09/28

/ 3:00 PM /

ATTENDEES

Leafy, Alexa, Braxton, Mae

AGENDA

- Dividing labor among developers to be able to isolate large ajaxindex functions into separate files. Emphasis on cloning repository for each person. Vadadocs shows all functions in ajaxindex
-

ACTION ITEMS

2. **Tomorrow, dr perry. Work on functions together and make sure git runs right.**
3. Next week, further understanding code and looking at vada logic is priority. We should keep developing our github pages front end.
4. Choose 10/11 as our presentation day for milestone 1

INDY 2

Vada Project 10/18

/ 3:00 PM /

ATTENDEES

Leafy, Alexa, Braxton, Mae, Dr. Donahue

AGENDA

- Developer check-in:
    - Refactor tasks are still in progress.
- Dr. Donahue provides some feedback on the current vadaproject.com version:
    - Bug: Thesis not created correctly?
        - Input a new topic
        - by starting a new claim
        - Create an inference, shows up as an inference with a direct
        - Unable to reproduce.
    - Bug: Subject text is not displayed on details page
        - Probably a PHP error. Linter might find it.
    - Usability feedback
        - Navigating from a modal dialogue is not obvious. Add an X button?
        - Navigating from the details page back to home is not obvious. Add a back button?
    - Other feedback:
        - User interface is still “a bit Soviet”.
        - Consider turning this into an immersive RPG (/s)
- No feedback from Perry yet on Project Plan. Hopefully everything should be fine, no IP issues.

ACTION ITEMS

1. Alexa and Braxton implement issues #11, #16, #17, and create Pull Requests. Hopefully finished by tomorrow.
2. Mae will create an issue for the bugs noted above.
3. Dev team will meet Thursday to discuss Milestone #1 presentation
    a. Mae did all the VCS setup, so she is happy to take the lead on this presentation. Unless she has a bad mental health day.
4. Mae and Leafy will meet Friday to discuss UI updates

INDY 2

Vada Project 10/19

/ 3:00 PM /

ATTENDEES

Mae, Braxton, Alexa

AGENDA

Last Meeting Follow-up

7. Lorem ipsum dolor sit amet, consectetuer adipiscing elit.

New Business

- Lorem ipsum dolor sit amet, consectetuer adipiscing elit.
- Suspendisse scelerisque mi a mi.

ACTION ITEMS

1. **Braxton:** Research Hugo, attempt to deploy starter template before Tuesday
2. **Alexa:** Work on issues #17 and #18.

TOMORROW'S AGENDA

Milestone 1 Presentation

INDY 2

Vada Project 10/28

/ 3:00 PM /

ATTENDEES

Wendy Writer, Ronny Reader, Abby Author

AGENDA

- hyperlinks, no subject/bugs, collapsing. (check)
- Package finalize
    - Code database
    - Vadadocs
    - Readme files
    - Database files
    - Database explanation
    - Readme for installing localhost on windows
- Ui changes (check)
- **Form validation for individual fields (UNCHECK)**
- **Change testimony to word processing front end (UNCHECK)**

NEXT WEEK'S AGENDA

Together topics:

1. Commenting out sql statements
2. Leafy show mae <ul> structure for claim/display structure
3. Add <a href> tag (leafy do it, theres a function already)

   https://www.sanwebe.com/2012/07/plain-urls-to-clickable-links-php

4. Leafy finish dividing code (CHECK)

5. Subject bug… uuuugh ;(

Ideas from new display: having sidebar available. Which cards should be collapsed or expanded at a time? Should the modal exist, should the details page exist?

INDY 2

Vada Project 11/2

/ 3:00 PM /

ATTENDEES

Wendy Writer, Ronny Reader, Abby Author

AGENDA

- hyperlinks, no subject/bugs, collapsing. (check)
- Package finalize
    - Code database
    - Vadadocs
    - Readme files
    - Database files
    - Database explanation
    - Readme for installing localhost on windows
- Ui changes (check)
- **Form validation for individual fields (UNCHECK)**
- **Change testimony to word processing front end (UNCHECK)**

NEXT WEEK'S AGENDA

Together topics:

6. Commenting out sql statements
7. Leafy show mae <ul> structure for claim/display structure
8. Add <a href> tag (leafy do it, theres a function already)

   https://www.sanwebe.com/2012/07/plain-urls-to-clickable-links-php

9. Leafy finish dividing code (CHECK)

10. Subject bug…

Ideas from new display: having sidebar available. Which cards should be collapsed or expanded at a time? Should the modal exist, should the details page exist?

Class Time activity

Week 1.
First meeting: creation of group with quindarius 8/16
Second meeting: quindarius dropped, added Braxton and Alexa 8/18

Week 2.
First meeting: Perry lecture on project proposal, spent the class completing project proposal 8/23
Second meeting: suggestions gathering for requirement phase (whiteboard pic) 8/25

Week 3.
First meeting: IP lecture 8/30
Second meeting: slightly more lecture on what requirements are good for the project. Leafy and co. completed code walkthrough and saw backend of code. 9/1

Week 4.
First meeting: research and a1 signing, localhost installed, PHP manager research. 9/6

Second meeting: Professor Perry gave info on job fair. Directed us to write lower level requirements for documents. Mae went to UITS. Research PHP management. Leafy create userdocs for files. Create Gantt chart. 9/8

Week 5.
First meeting: Mae got localhost to work. Reworked HTML and changed PHP formatting and made the first commit to the github page. Professor Perry had no lecture.

Second Meeting: Sharon Perry plans lecture for project plan. Project plan details released on d2l, Alexa gave overview and notes of highlights in the group chat.

We all get a domain from Kennesaw studentwebkennesaw.edu/~netid (use the ksu vpn to connect)

Emphasized keeping meeting notes, tracking progress, and providing contact information (we have all of this thoroughly done so far)

Project Plan will be group submission (one person submits) with approval for the project plan signed by prof Perry AND by Dr. Donahue

project plan template: two milestone events (minimum), milestone 1 (mid oct): prototype, initial research results, milestone 2 (mid nov.): draft of final report

the project plan also has the Gantt chart attached with it, and a list of tasks/requirements

Version control plan should show source code management

Due sept 24.

we get an extra point credit for applying to c-day, another point for getting in, and another point for awards received
we'll have to do a peer evaluation and a career profile to do individually eventually

Week 6.
First meeting: Mae was unable to make the meeting. Career fair information and alumni donation information. Linkedin submission noted.

Braxton and Alexa haven't got localhost installed due to Mac differences. Braxton will look at error messages and send to Leafy, and Alexa will install remote desktop access to run localhost on windows and access remotely from mac when needed.

Practiced elevator pitches

Second Meeting 9/22:

Finishing project plan together. Mae helped with formatting, Alexa completed Gantt chart, team reviewed labor division for code revision.
Using git issues to assign those to Braxton and Alexa.
Alternatively, we can use "todo" comments or "fixme" comments to show where code needs fixing.

Week 7

First Meeting: career fair 9/27

Second meeting: 9/2
Follow up after career fair and checkins with individual students.
Atm she's giving a tutorial on how to use our KSU provided HTML hosting at studentweb.kennesaw.edu. Not necessary if we're just planning on using the github.io site
10/11 milestone presentation

Week 8

First meeting:
October 4
Went over c-day requirements and had lecture on website requirements. Submission dates. Milestone deadlines. Etc.

Second Meeting:

October 6
Free time for working, pushing changes.
Outline for milestone:

Code overview
Ui walkthrough
Version control and VScode extensions used.

Week 9
Oct 11
Mandatory attendance for presentation
Oct 13
Mandatory attendance for presentation

Week 10
Oct 18
M1 readiness finished

Oct 20
M1 milestone was delegated to alexa. Leafy and mae collaborated to find new tasks to delegate and also found solutions to the ui issues.

Week 11

10/25:
Check in with C-Day requirements with perry

10/27
No class meeting due to c-day checkins, work completed with self-directed time

Week 12

11/1
Missed class - sick

11/3
Self directed time, focus on c-day requirements,

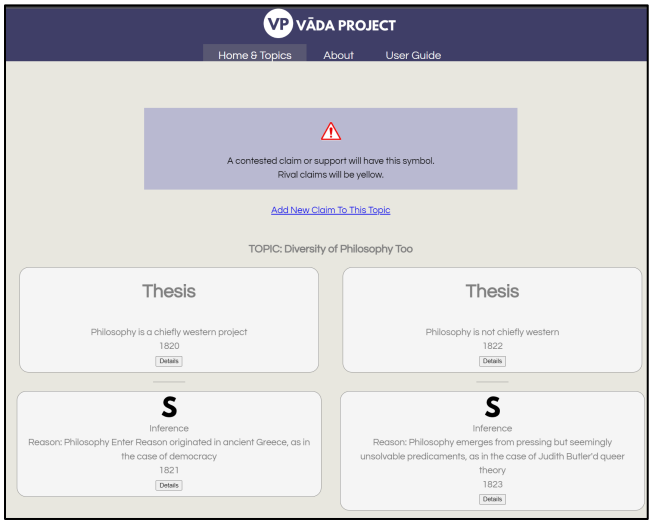
Week 13

11/8
Sharon perry lecture on workplace etiquette and company success

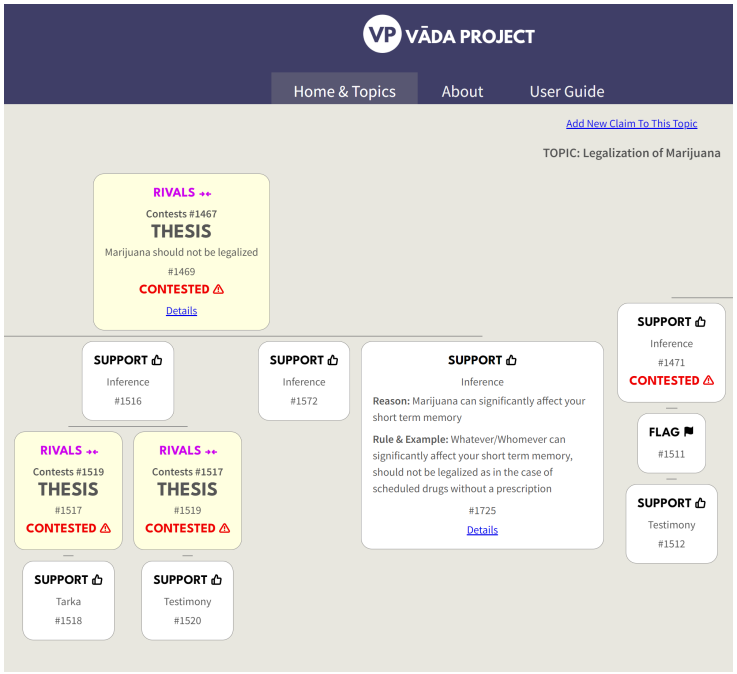
11/10

Milestone presentations #1 - cday prep

Prototype Images



After Revision of Prototype



Poster Overview

The Vāda Project is a web application that teaches pramāṇa-vāda, a classic style of philosophical debate developed in ancient India and used for over a millennium. This debate format is designed to promote critical thought and reflection through its logical

structure of theses and counter. This semester-long project was undertaken as a collaboration between students and faculty within the College of Computing and KSU philosophy department. Developers acquired the philosophy department's existing codebase, developed, refactored, and maintained a web-based UI and PHP+SQL server backend to deliver a well-documented and maintainable interactive platform for epistemological discussion.

Methodology

Through weekly meetings with end-users, and closely following the software development life cycle, a team of student developers delivered a codebase which emphasizes (1) usability and accessibility and (2) maintainability by future developers. Developers applied industry best-practices (user centered design, version-control, testing, and continuous integration) to discover and meet all requirements.

VERSION CONTROL / CONTINUOUS INTEGRATION

To enable present and future collaboration, developers closely used a GitHub repository to track changes. Code is deployed live from this repository to the production site. GitHub Actions perform automated code quality tests.

Gantt Chart (Micro-Version for Report)

	Project Environment				***New UI Format***				***Future Documentation***				**C-Day**	
Tasks	**09/02**	**09/09**	**09/16**	**09/23**	**09/30**	**10/07**	**10/14**	**10/21**	**10/28**	**11/04**	**11/11**	**11/18**	**11/25**	**12/02**
Meet with team and Donahue	20	12	5											
Define requirements														
Review requirements with Donahue		10	15											

Get sign off on requirements			5	10	4									
GitHub setup				10	4									
Localhost setup				5	10	10								
Clone Repository						10	10							
VadaDocs						10	10							
Readme Files						10	10							
Commenting Code						10	10							
Review prototype design								8	5	10				
Brainstorm Prototype Designs					10	5	5							
Develop working prototype						10	10							
Test prototype							5	10	5					
Rework requirements								8	10	20	20			
Document updated design											10	10		
Test product										8	5	20		
Presentation preparation												15	10	10
Poster preparation														10
Final report submission to D2L and project owner														5
	20	**22**	**25**	**25**	**28**	**65**	**60**	**26**	**20**	**38**	**35**	**45**	**10**	**25**

RESULTS

Students and staff in the philosophy department responded very positively to UI changes, and overall code quality increased. The project is actively being used as a teaching tool. Introducing students to non-western philosophy. This project will continue to aid philosophy students that will go into law school, legal advising, and other technical positions.