

Project Plan: The Vāda Project

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Sponsored by Dr. Amy Donahue

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Overview

The *Vāda Project* is a web application for structured collaborative debate, implementing the principles of *pramāṇavāda*, a classical Indian system of debate. The project was conceived by Dr. Amy Donahue of the Kennesaw State University Philosophy Department, as part of her research on Indian logic, and initially developed by Leafy Wilson, and is used to demonstrate Vada Logic.

This project's goal is to adapt and refactor the existing application (built using Apache, PHP, and SQL), to enhance its usability, functionality, and future maintainability.

This project is supported by the research and expertise of Dr. Amy Donahue, a member of KSU faculty. Dr. Donahue asserts complete ownership over all intellectual property.

Project Team

Role	Name	Responsibilities
Project owner	Dr. Amy Donahue	Consulting, requirements, final evaluation
Project manager	Leafy Wilson	Project management, documentation/notes, organizing, <i>vāda</i> 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.

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 (phptheway.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

Signed by

Amy Donahue

Project Owner

9/24/2022

Date