

Statement of Work

Version: 1.0

Date: 31/07/2024

Description: Initial release of the document

Name of Project: AI + Human Exploration of Daily Moral Decisions

Team Members:

- Ceming Fu
- Shiyang Cai
- Xinlong Wu
- Xuan Liu
- Zhongzheng Huang
- Zehua Kong
- Zhenhao Li

Table Of Contents

Background	3
Project Description	3
Target User	3
Project Phases	4
Project Management	5
Risk Management	6
- Risk Identification	6
- Risk Evaluation	6
- Risk Response	6
- Documentation and records	6
Resource and Cost Management	6
- Cost	6
- Hardware and server costs	6
- Software costs	6
- Resource	7
APPROVAL AND AUTHORIZATION	7

Background

In recent years, the intersection of artificial intelligence (AI) and ethics has emerged as a critical area of research. Projects such as Ask Delphi and the Moral Machine Experiment have made significant strides in understanding how AI can be aligned with human moral values. However, these projects often focus on idealized or extreme moral dilemmas, such as the trolley problem, which may not fully capture the complexity of everyday moral decision-making.

Project Description

The "AI + Human Exploration of Daily Moral Decisions" project aims to bridge this gap by focusing on the nuances of everyday moral dilemmas. By leveraging AI and human collaboration, the project seeks to provide a more comprehensive understanding of how people navigate moral decisions in their daily lives. The project will involve the development of an interactive Moral Profile Website, which aims to attract users to the large-scale Opinion Survey Website and to present some of the research findings. The Moral Profile Website will assist humans in appreciating the rich and nuanced aspects of moral life. The Opinion Survey Website will explore whether individuals are willing to change their opinions under the influence of others.

Target User

The primary target users for the "AI + Human Exploration of Daily Moral Decisions" project are individuals interested in exploring moral dilemmas and contributing to the understanding of human moral decision-making. This includes:

General Public: People from various backgrounds who are curious about moral dilemmas and willing to engage with the interactive Moral Profile Website and participate in the Opinion Survey.

Researchers and Academics: Individuals in the fields of ethics, philosophy, psychology, and artificial intelligence who are interested in studying human moral decisions and the potential integration of AI in ethical reasoning.

Educators and Students: Teachers and students who can use the platform as a tool for education and discussion around moral and ethical issues.

Policy Makers: Individuals involved in policy-making who can use the insights gathered from the project to inform decisions on AI ethics and regulation.

The project aims to reach a diverse audience across different languages and countries to ensure a comprehensive understanding of global moral perspectives.

Develop Plan

Project Phases

- **Phase 1: Initial Preparations and UI Design for Moral Search Website**
 - **Objective:** Complete SoW and other initial documentation, construct the Landing Site, and finalize team assignments. Begin UI design for the Moral Search Website. Set up the CI/CD environment and preliminary database. Familiar with the code repository and try to implement Game Page.
 - **Timeline:** Week1 to Week3
 - **Responsibilities:**
 - Xinlong Wu: Overall project coordination, client communication and setup for the Landing Site.
 - Xuan Liu and Shiyong Cai: UI/UX design for the Moral Search Website.
 - Ceming Fu and Zhongzheng Huang: Preliminary database setup and environment setup for the Survey Website.
 - Zehua Kong and Zhenhao Li: Set up environment, start to implement Game Page
 - **Deliverables:** Completed UI design for the Search page, environment setup, and CI/CD Scripts.
 - **Milestones:** Completion of the Landing Site, team assignments, and Moral Search Website design.
- **Phase 2: Iteration and Front-end Implementation**
 - **Objective:** implement Survey Page, Game & game result page, set up API Document, Design Mobile UI
 - **Timeline:** Week3 to Week6
 - **Responsibilities:**
 - Xinlong Wu: Continual client communication and project refinement based on client feedback. Design API for project.
 - Ceming Fu and Zhongzheng Huang: and Survey Website.
 - Xuan Liu and Shiyong Cai: Continue UI/UX design.
 - Zehua Kong and Zhenhao Li: Front-end development for the Game Page and Game result page
 - **Deliverables:** Mobile page design, Deployed Survey page, and front-end implementation.

- **Milestones:** Completion of UI design iterations for the Mobile access, implementation of Game Page/result page and Survey.
- **Phase 3: Back-end Development and Further front-end Iterations**
 - **Objective:** Implement the Index page and search page. Begin Mobile UI design iterations for the homepage. Complete back-end implementation, API setup, and database connections for 5 surveys.
 - **Timeline:** Week6 to Week10
 - **Responsibilities:**
 - Xinlong Wu: Ongoing client liaison, feedback integration, and project adjustments.
 - Ceming Fu and Zhongzheng Huang: Back-end development, API implementation, and database connections.
 - Xuan Liu and Shiyong Cai: UI/UX design for the Survey Feedback page and brainstorm for Acknowledgement page.
 - Zehua Kong and Zhenhao Li: Index page and search page
 - **Deliverables:** A fully functional and robust back end supporting database interaction, API functionality, and server management for the Opinion Survey Website. Completion of UI design for the Survey Feedback page.
 - **Milestones:** Completion of back-end development, successful database integration, server setup, and finalization of the homepage Search functionality.

Project Management

In managing our web API development project, we faced challenges such as increasing complexity, the need for consistency in development environments, version control requirements, and time and resource constraints. To address these, we made the following decisions:

- Use Git as our version control system to facilitate collaboration and prevent conflicts.
- Use GitHub Organization to organize all project-related repositories. Submitting code to clients by way of GitHub PR's
- Use a unified server environment + VS Code for development. Ensure uniformity across the team to prevent inconsistencies.
- Use Postman for testing to ensure the code's reliability and effectiveness.
- Choose Jira for task management, aiming for seamless integration, simplicity, cost-effectiveness, and enhanced collaboration within the team.
- Use agile project management as well as agile development methods. We expect to set a weekly development cycle. Synchronization of tasks and

progress at each stage of the development cycle will be determined through frequently scheduled stand-up meetings, and tasks for the next stage or cycle will be decided.

- We meet with our clients once a week at a set time to synchronize current project progress and to consult with them on issues. The meeting agenda is sent to the client in advance of the meeting.

By focusing on integration, simplicity, and collaboration, we've positioned our team to work with greater agility and transparency, aligning our tooling and workflows with the specific needs and goals of our project.

Risk Management

- **Risk Identification**

Make the most of every team station meeting, synchronized meetings with clients, and meetings with tutors to communicate positively. Encourage team members to actively raise possible risks.

- **Risk Evaluation**

Utilize weekly station meetings to perform qualitative and quantitative assessments of identified risks, including assessing the probability and impact level of the risk. Risks are prioritized based on their level of impact.

- **Risk Response**

Develop response strategies for each risk, including avoidance, transfer, mitigation, and acceptance. Ensure that the response strategy is aligned with project objectives and stakeholder expectations.

Incorporate risk response strategies into project plans and implementation. Ensure that team members have the skills and resources to address the corresponding risks.

- **Documentation and records**

Document all identified risks, assessments, response strategies, and implementation processes.

Resource and Cost Management

- Cost

- Hardware and server costs

Servers: For remote development, Providing a unified development environment for individual developers is a better reproduction of problems and improves development efficiency.

- Software costs

Development tools: most open-source tools (e.g., Python, VS Code, MongoDB, Node.js, React.js) are free.

Server software: database and database management systems, web server software

- Tech Stack

- Frontend: React.js, Next.js Node.js
- Backend: Nest.js, Node.js
- survey: LabintheWild

- Resource

- Data: Redit Data (In MongoDB), AI-generated Data (By AI Model), On OneDrive.
- AI Model:
 - <https://huggingface.co/joshnguyen/mformer-authority>
 - <https://huggingface.co/joshnguyen/mformer-care>
 - <https://huggingface.co/joshnguyen/mformer-fairness>
 - <https://huggingface.co/joshnguyen/mformer-loyalty>
 - <https://huggingface.co/joshnguyen/mformer-sanctity>
- Template: [24-S1-2-C-Moral-Decisions/LITW-study-templates:](#)
- Organization: [24-S1-2-C Moral Decisions](#)
- Existing Code: [24-S1-2-C-Moral-Decisions/moral_moments at main](#)

APPROVAL AND AUTHORIZATION

Team Member	UID
Ceming Fu	u7574421
Shiying Cai	u7580335
Xinlong Wu	u7619947

Xuan Liu	u6393399
Zhongzheng Huang	u7580107
Zehua Kong	u7693498
Zhenhao Li	u7721107

Team	Signature	Date	Client	Signature	Date
------	-----------	------	--------	-----------	------