# Statement of Work

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**Description:** Initial release of the document

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

### **Team Members:**

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## 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: Moral Moments and Opinion Survey Web UI Design
  - Objective: Design an engaging and interactive UI that allows users to explore moral dilemmas, guiding them towards a comprehensive Opinion Survey. The design phase will culminate in the completion of the website's homepage UI and survey page UI.
  - **Timeline:** week1 to week2
  - Responsibilities:
    - Xinlong Wu: Overall project coordination and client communication.
    - Xuan Liu and Shiying Cai: UI/UX design and website testing.
  - **Deliverables:** Website homepage and survey page UI designs.
  - **Milestones:** Completion of UI/UX designs for both the homepage and survey pages.

#### - Phase 2: Front-end Implementation and API Design

- Objective: This phase focus on implementing the front end of the website, designing the API interfaces, and incorporating responsive design principles. The aim is to bring the UI designs to life, and guarantee that the website provides consistent user experience across all devices.
- **Timeline**: week3 to week6
- Responsibilities:
  - Xinlong Wu: Continual client communication and project refinement based on client feedback.
  - Ceming Fu and Zhongzheng Huang: Front end development and API design.
  - Xuan Liu and Shiying Cai: Website testing.
- Deliverables: An implemented homepage and survey page on the front end that adapts to various devices and a complete API documentation.
- **Milestones:** Completion of front end implementation and API design.

#### - Phase 3: Back-end Implementation

 Objective: Develop the backend for the website, focusing on server management, database integration, and implementing the designed API interfaces. This phase includes setting up the server environment, ensuring data storage and retrieval functionality.

- Timeline: week7 to week11
- Responsibilities:
  - Xinlong Wu: Ongoing client liaison, feedback integration, and project adjustments.
  - Ceming Fu and Zhongzheng Huang: Back end development and server management.
  - Xuan Liu and Shiying Cai: Back end testing.
- Deliverables: A fully functional and robust back end, supporting database interaction and server management.
- **Milestones:** Completion of back end development, successful database integration and server setup.

## **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.
- Chose 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-ups meeting, 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 develop, 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.jssurvey: LabintheWild

#### Resource

- Data: Redit Data (In MongoDB), Al-generated Data (By Al Model), On OneDrive.
- Al Model:
  - https://huggingface.co/joshnguyen/mformer-authority
  - <a href="https://huggingface.co/joshnguyen/mformer-care">https://huggingface.co/joshnguyen/mformer-care</a>
  - https://huggingface.co/joshnguyen/mformer-fairness
  - https://huggingface.co/joshnguyen/mformer-loyalty
  - <a href="https://huggingface.co/joshnguyen/mformer-sanctity">https://huggingface.co/joshnguyen/mformer-sanctity</a>
- Template: 24-S1-2-C-Moral-Decisions/LITW-study-templates:
- Organization: <u>24-S1-2-C Moral Decisions</u>
- Existing Code: <u>24-S1-2-C-Moral-Decisions/moral\_moments at main</u>

## APPROVAL AND AUTHORIZATION

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Team	Signature	Date	Client	Signature	Date