Virtual Fashion Designer

(Implementation Plan)

Weeks 1-2: Understanding the Ontology and Data Collection

- **Week 1**: Familiarize the team with the fashion ontology. Understand its structure, categories, and how it defines fashion trends.
- **Week 2**: Start collecting and preprocessing data. Prepare the fashion images dataset that aligns with the ontology's categories.

Weeks 3-4: Developing the Recommendation Engine

- **Week 3**: Develop the backend infrastructure. Set up servers, databases, and necessary frameworks.
- **Week 4**: Begin building the recommendation engine using the ontology data. Implement algorithms for personalized fashion suggestions based on user preferences and fashion trends.

Weeks 5-6: Virtual Clothing Try-On Feature

- **Week 5**: Research and experiment with computer vision techniques for virtual try-on. Explore tools like OpenCV and ARKit.
- **Week 6**: Integrate the virtual try-on feature with the frontend. Ensure seamless overlay of virtual clothing items on user images.

Weeks 7-8: User Interface Development

- **Week 7**: Design the user interface (UI) and user experience (UX) of the web application. Create wireframes and mockups.
- **Week 8**: Start frontend development. Implement the UI components and integrate them with the backend services.

Weeks 9-10: User Testing and Feedback

- **Week 9**: Conduct initial user testing sessions. Gather feedback on the user interface and virtual try-on experience.
- **Week 10**: Refine the user interface based on feedback. Address any usability issues and improve the virtual try-on feature's realism.

Weeks 11-12: Optimization and Performance Testing

- **Week 11**: Optimize the recommendation algorithms and virtual try-on feature for efficiency and accuracy.
- **Week 12**: Perform rigorous performance testing. Identify and resolve bottlenecks in the system.

Weeks 13-14: Integration and Finalization

- **Week 13**: Integrate all components of the application. Ensure seamless communication between the recommendation engine, virtual try-on feature, and user interface.
- **Week 14**: Finalize the application. Conduct comprehensive testing to ensure all features work cohesively. Prepare for deployment.

Weeks 15-16: Deployment and Documentation

- **Week 15**: Deploy the web application on a hosting platform (e.g., AWS, Heroku). Set up necessary security measures and domain configurations.
- **Week 16**: Create comprehensive documentation. Include user guides, API documentation, and a detailed report outlining the project, methodologies, challenges faced, and solutions implemented. Prepare for project presentation and demonstration.