1. **Introduction**
   * **1.1 Background and Motivation**
   * **1.2 Problem Statement**
   * **1.3 Objectives of the Study**
   * **1.4 Structure of the Thesis**
2. **State of the Art**
   * **2.1 Overview of Large Language Models (LLMs)**
   * **2.2 Optimization Techniques**
   * **2.3 Explainable AI**
   * **2.4 Interactive and User-Centric Systems**
   * **2.5 Integrating LLMs in Optimization**
3. **Methodology**
   * **3.1 Research Design**
   * **3.2 System Architecture**
   * **3.3 Data Collection**
   * **3.4 Implementation Details (Development Tools and Technologies, LLM, UI)**
   * **3.5 User Feedback Mechanisms (Explainable AI etc)**
4. **Development and Implementation**
   * **4.1 Initial System Setup**
   * **4.2 Implementing the Optimization Framework (Algorithm, Development, Training, Fine-Tuning, Code etc.)**
   * **4.3 Building the User Interface**
   * **4.4 Testing and Validation**
5. **Case Study? (mit aufnehmen?)**
6. **Results and Discussion**
   * **5.1 System Performance Evaluation**
   * **5.2 User Feedback Analysis**
   * **5.3 Case Study Results**
7. **Conclusion**
   * **7.1 Summary**
   * **7.2 Contributions**
   * **7.3 Limitations**
   * **7.4 Recommendations for Future Research**