

List of Resources

Human Resources

- **Project Lead:** Coordinates overall project activities and ensures alignment with vision
- **AI/ML Engineer:** Manages Ollama setup, model selection, and optimization
- **Full-Stack Developer:** Implements both frontend and backend components
- **UI/UX Designer:** Creates user-centered design and visual elements
- **Content Specialist:** Expert in Turkish humor and cultural context for prompt engineering

Technical Resources

Development Tools

- **Code Editor:** Visual Studio Code with Python and JavaScript extensions
- **Version Control:** GitLab for code repository and CI/CD pipeline
- **Project Management:** Jira for task tracking and sprint management
- **Communication:** Discord for team communication and file sharing

Software Requirements

- **Backend Framework:** Flask 2.x with Python 3.9+
- **AI Infrastructure:** Ollama running DeepSeek-r1:14b model
- **Frontend Technologies:**
 - HTML5/CSS3 with modern CSS features
 - Vanilla JavaScript with optional Alpine.js for interactivity
 - Tailwind CSS for styling
 - Font Awesome and Google Fonts for typography and icons

Hardware Requirements

- **Development Workstations:** Minimum 16GB RAM, quad-core CPU
- **Test Environment:** System with 8GB+ RAM for running Ollama locally
- **Production Server:** VPS with 16GB RAM, 4 vCPUs, 40GB SSD
- **CDN:** For static asset delivery and caching

Third-party Services

- **Analytics:** Simple Analytics for privacy-focused usage tracking
- **Monitoring:** Sentry for error tracking and performance monitoring
- **Content Delivery:** Cloudflare for protection and delivery optimization

Documentation

- API specifications (Swagger/OpenAPI)
- Development workflow guide
- Model configuration documentation
- Deployment and maintenance procedures
- Content guidelines for prompt engineering

External Resources

- Turkish linguistic and cultural references
- Collection of traditional joke structures and patterns
- Research papers on Turkish NLP and humor analysis
- UX design patterns for similar entertainment applications

Testing and Quality Assurance

- Jest for JavaScript unit testing
- Pytest for Python backend testing
- Lighthouse for performance testing
- Manual testing checklist for cultural relevance and appropriateness

Security Resources

- OWASP security guidelines implementation
- Input sanitation and validation standards
- Rate limiting configuration
- API security best practices