Project: Automated SCRUM

Team Name: BrainWave

Date 17.01.2024

Problem Statement



The objective of this project is to develop an automated Scrum platform integrating advanced Language Models (LLM) to track task statuses, provide real-time insights into code status, automate Scrum meeting summarizations, and enable efficient workload tracking.

Target Audience



Software development teams, project managers, and organizations utilizing Scrum methodology for their project management processes, IT Companies

Value Propositions



- Efficient Task Management: The automated Scrum platform streamlines task management, providing a centralized hub for teams to track, update, and monitor task statuses in real-time. This leads to increased productivity and transparency in project execution.
- Reducing Human Effort of
 Optimization of Workload
 Tracking. Improving productivity
 of the team and reducing
 communication gaps.
- Enabling Data Driven Decision
 Making for continuous
 improvement in project delivery.

Al Approach



- Natural Language Processing
 (NLP): Preprocess and analyze
 SCRUM meetings to extract task
 status of each of the project
 members.
- Machine Learning: Fine-tune LLMs to infer the status of completion of code based on the difference in consecutive commits in Github.
- Deep Learning: Use deep learning for voice to text models for effective summarization of the meeting conversation.

Technical Stack



- Web Development Frameworks: React js , Django
- Programming languages:Python
- NLP libraries: NLTK, TextBlob
- Machine learning frameworks: TensorFlow, scikit-learn,
 PyTorch, HuggingFace
 Transformers
- Cloud platforms for deployment

Data and Resources



- Using our teams collected meeting data for the speech to text summarisation model
- Open source LLMs

Team

Introduce team members, their skills, and their assigned roles in the project.

- Riddhi Kulkarni (Team Lead / Frontend): Focus on building user-friendly interfaces
- Atharva Date (Lead Developer): Expertise in NLP and machine learning
- Aman Upganlawar (Data Scientist): Experience in data exploration and model training
- Abhay Shanbhag (ML Developer): Expertise in ML
- Pritika Rohera (Backend Developer) : Experience in handling databases
- Sattwik Sahu (UI/UX lead): Focus on designing a user-friendly interface for visualizing insights



Success Criteria



- Developing a system that has the potential to simplify the process of project management.
- Have a functioning interface with a user friendly User interface and User experience