Generative AI Agents for Minecraft: Automating Creative World Tasks with Amazon Bedrock

Project Progress – Sprint 1

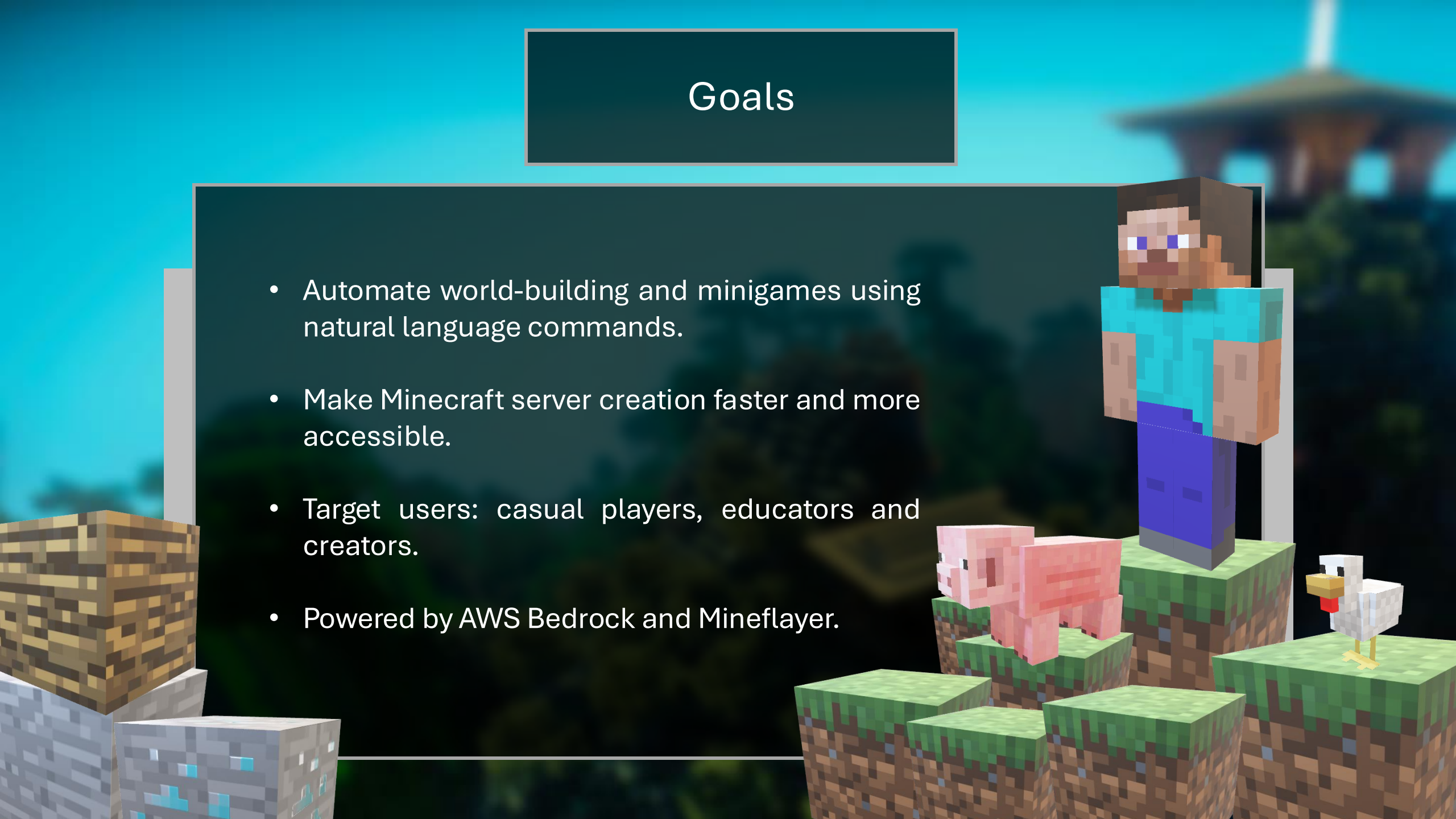

Team Members
Sanjna Kumari
Faraz Ulhaq Shah
Taeesh Azal Assadi

Project Overview

An AI-powered Minecraft agent that automates world-building and gameplay with natural language commands, using Amazon Bedrock.

Goals

- Automate world-building and minigames using natural language commands.
- Make Minecraft server creation faster and more accessible.
- Target users: casual players, educators and creators.
- Powered by AWS Bedrock and Mineflayer.



Work Accomplished

- Backend setup with Mineflayer.
- CloudFormation template created.
- Basic AI command execution.
- Local testing environment completed.
- Demo video showcasing functional prototype.
- Sprint retrospective.

User Stories Completed – Sprint 1
User Story 1

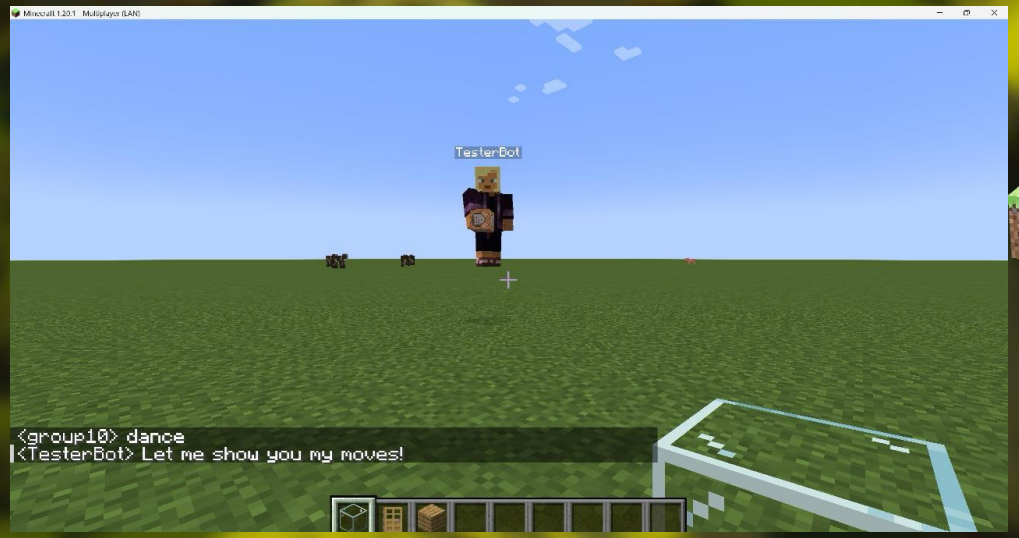
Quick World Generation for New Server Owners

- Command Used: Build a house.
- Outcome: Testerbot successfully built a small wooden house in response to the chat command

User Stories Completed – Sprint 1
User Story 2

Real-time Chat Interaction with AI

- Command Used:
  follow me, stop follow, dance.
- Bot responses:
  Following you!, Stopped following!, Let me show you my moves!



Progress vs Original Goals

Original Sprint 1 Goals

- Setup backend infrastructure.
- Implement basic structure generation.
- Connect Minecraft with bot using Mineflayer.
- Local testing.

User Stories Completed

- Quick World Generation
- Real-time Chat Interaction.
- Basic AI Responses.

Pending – Pushed to Sprint 2

- AWS Bedrock Integration

Sprint 2 Preview

1. Integrate AWS Bedrock.
2. Enable complex structure generation.
3. Implement real-time execution testing.


Thank You!