

# Proposal for docIT: A Discord Bot for Maker DAO Documentation and Support

## Introduction

We have developed docIT, a private Discord bot that enables users to “talk to your docs.” The bot is designed to support multiple document sites, integrating evolving Language Learning Models (LLMs). It aims to unify Maker DAO’s essential GitHub repositories, documentation, related articles, and forum posts. This provides users with a conversational interface where they can ask questions and receive natural language responses, complete with supporting links. Our goal is to integrate docIT with the Maker DAO ecosystem to lower educational barriers. To ensure transparent and accurate information, docIT is programmed to prevent hallucinations and provide responses with sourced material.

## Objectives

Our primary objectives include:

- Augmenting the Developer Relations (DevRel) and Community Support teams at Maker DAO
- Reducing the workload for support teams on Discord
- Accelerating responses to frequently asked questions

Through these objectives, we aim to enhance both team and user experiences by facilitating more efficient and effective interactions.

## Background

The success of technical Web3 projects is closely linked to an ecosystem of developers utilizing the protocols. Developers often rely on official documentation and GitHub repositories to understand various projects. However, no documentation can be entirely exhaustive, requiring a team to offer “frontline” support for those developing or using the protocol.

Developer Relations and Community Support teams serve as the initial human interface with these protocols. Their primary roles include fostering developer communities and gauging product-market fit. A common challenge these teams face is the lack of sufficient human resources to address the plethora of questions and inquiries received daily. Our solution aims to free up the Maker DAO support teams to focus on their core strengths, which include resolving unique customer issues, establishing trust, and nurturing an engaged community.

## Team

Nigel Alford

- Role

: Technologist and Entrepreneur

- Expertise

: Specializes in decentralized solutions. Previously developed a Maker DAO NFT marketplace for book authors. Involved in various technical projects ranging from blockchains to digital maps.

- Objective

: To reduce technical friction and expedite project development.

- GitHub

: mrnigelalford

- LinkedIn

: [Nigel Alford](#)

## Project Plan (4-Week Delivery)

### Pre-Implementation

Collaborate with the DevRel, Customer Support, and Community Support teams to understand their needs, identify pain points, and decide where the bot can be most effective. The insights gathered will guide the selection of data sources for implementation.

## **Milestone 1: Implementation of Data Sources (2 Weeks)**

- Objective

: Incorporate 3-4 high-value data sources into the bot.

- Tasks

: Crawl data, create OpenAI embeddings in our database to index and set up search functionalities.

- End State

: Have 3-4 data sources that can be queried.

- Expected Bugs

: Hallucinations, mismatches on query/documents.

## **Milestone 2: Testing and Optimization + Deploy to Production (2 Weeks)**

- Objective

: Refine the bot and make it production-ready.

- Tasks

: Eliminate hallucinations, optimize prompt engineering, and ensure only relevant answers are provided, along with source material and links.

- End State

: A production-ready bot, approved by the Customer/Community Support teams for deployment on Maker DAO's Discord.

## **Technology Stack**

- OpenAI & LLAMA2 LLM
- Digital Ocean (Hosting)
- Supabase (Database)
- Node.js (Backend)

## **Funding Requirements**

We are requesting an \$8,000 USD grant to build and maintain the bot, broken down as follows:

- Infrastructure Costs (\$2,000)

: 12-month provision, covering OpenAI token usage, Digital Ocean, and Supabase databases.

- Development Costs (\$6,000)

: Includes back-end code maintenance, LLM logic updates, and adding new bot commands as needed.

## **Additional Information**

### **Success Metrics**

- Target Users: Developers and users of Maker DAO
- Metrics:
  - Number of questions answered
  - Number of new unanswered questions

- Number of active rooms docIT is in

## Long-Term Plans

1. Migrate to private LLMs instead of relying on OpenAI.
2. Expand to other chat systems like Telegram and Slack.
3. Automate the data ingestion process to update data sources monthly.
4. Continuously monitor output quality to improve answers over time.
5. Add interactive features to enhance the bot's functionality beyond pure Q&A.

## GitHub Repository

[GitHub](#)

[\*\*GitHub - mrnigelford/docit-discord: discord bot to pair with docIT backend.\*\*](#)

discord bot to pair with docIT backend. Contribute to mrnigelford/docit-discord development by creating an account on GitHub.

## Data Models/API Specifications

Details covered in the Technology Stack section.