Forta Infinity Vision Statement

BotWeiser

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1 Abstract

1.1 Forta Infinity

Our team name is **Forta Infinity**.

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Industry partner: Forta (forta.org)

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1.2 Problem Statement

In the context of the Forta Network, where numerous bots serve various purposes, such as scam detection, exploit identification, and operational monitoring, users face a significant challenge in locating the most suitable bot or feed for their specific needs. This challenge hinders efficient utilization of the available resources and can lead to suboptimal bot selections. To address this issue, our project aims to develop an intelligent feed and bot finder powered by Large Language Models (LLMs). This intelligent system will analyze the descriptions and sample alerts associated with each detection bot deployed on the Forta Network. It will then take the user's problem space as input and provide personalized recommendations for a specific bot or feed, along with a rationale for the recommendation. The goal is to simplify and streamline the process of selecting and utilizing bots and feeds within the Forta Network, enhancing user experience and optimizing resource utilization. This solution should be easily accessible to Forta Network users, ensuring that they can make informed choices and efficiently address their specific needs.

1.3 Problem Relevance

In the realm of modern technology and automation, the effective management and utilization of diverse bots and feeds within the Forta Network have become increasingly crucial. The Forta Network hosts a multitude of these bots, each designed for specific tasks ranging from scam detection to exploit identification. However, the sheer volume and variety of available bots pose a significant challenge for users trying to identify the most relevant bot or feed for their unique needs. This problem is highly relevant because it directly impacts the efficiency and effectiveness of users' interactions with the Forta Network, which, in turn, affects their ability to tackle specific problems or tasks effectively. Addressing this issue through the development of an intelligent feed and bot finder using LLMs can greatly enhance

the usability and value of the Forta Network, making it a more powerful tool for users across different domains and problem-solving scenarios.

1.4 Current Methodologies

The current approach to bot recommendation within the Forta Network relies on keyword matching against bot titles, lacking semantic understanding and personalization. This limits its ability to accurately capture user intent and potentially overlooks relevant bots without exact keyword matches. Additionally, it doesn't provide users with explanations for recommended choices. To address these shortcomings, the development of an intelligent feed and bot finder using LLMs aims to enhance the Forta Network's usability by offering context-aware, personalized recommendations, improving the overall user experience.

2. Expected Outcome

Our main goal is to design a website that's easy for people to use on Forta.org. We're aiming to create a working model of a web application that can find the right bot when users search for them. Additionally, it will explain why a particular bot was suggested and how it can be useful, giving users a clear understanding. By doing this, we want to make it simpler and more enjoyable for users to navigate Forta Network and pick the right tools for their needs.

3. Milestones

- 1. GPT-4 Integration: Achieve proficiency in integrating GPT-4 into the project framework, leveraging tutorials and platform documentation.
- 2. Data Handling and Query Processing: Develop robust data handling capabilities and efficient query processing methods, ensuring smooth interaction with GPT-4.
- 3. Metadata Generation: Implement GPT-4 to generate comprehensive metadata summaries for each bot within the Forta Network based on their documentation and source code.
- 4. Query-Metadata Matching Algorithm: Create and optimize a query-matching algorithm that effectively matches user queries with the generated metadata summaries for accurate and context-aware bot recommendations.
- 5. Machine Learning Personalization: Employ machine learning techniques to personalize bot recommendations based on user behavior and preferences, enhancing the user experience within the Forta Network.

4. Implementation

- Utilize GPT 4 to generate a summary metadata for bots from their documentation and source code
- Use Summary metadata from GPT to find the best match to query.
- Create a web application using React.js to provide users capability to query bots with relevant descriptions.

4.1 Platforms & Technologies

- Python
- GPT 4.0 API
- React.js
- Docker Container

5. Contact

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