



Knight Foundation
School of Computing
and Information Sciences



School of Computing &
Information Sciences

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Nextcloud App: Exploring Integration with Kaseya VSA

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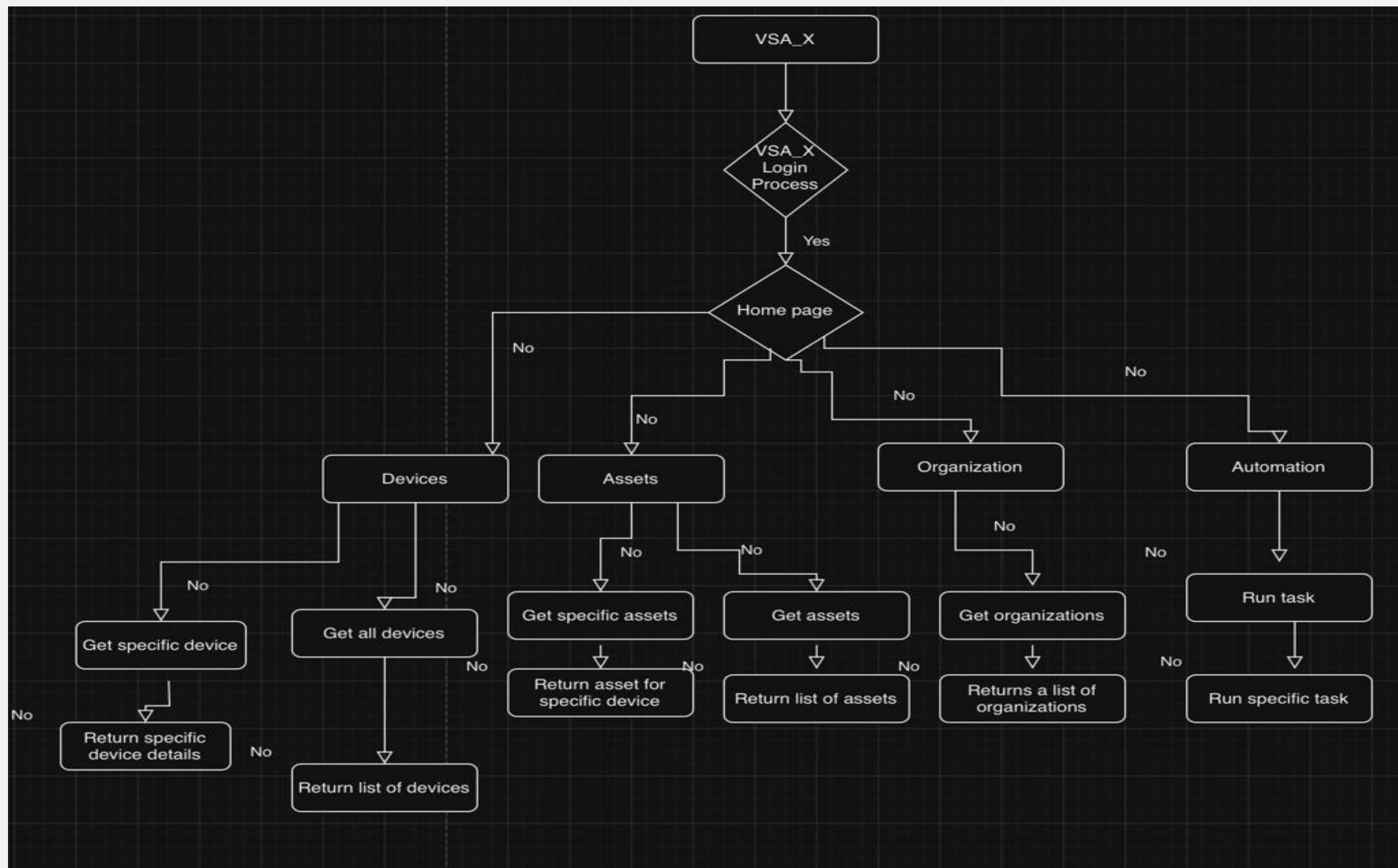


PROBLEM

The introduction of Kaseya's new flagship model, VSA X, brought forth challenges in user interface design, leaving much to be desired. Both the previous VSA 9 and the latest VSA X presented intricate user interfaces, posing difficulties for new users. Recognizing this, our customized Kaseya VSA application emerged to tackle this issue head-on, providing IT professionals with a simpler and more interactive method to access their crucial user data.

Leveraging the capabilities of Kaseya's Rest API, our solution effectively extracts data from both VSA 9 and VSA X models. This strategic integration empowers us to introduce user-friendly features, including "Agents Information," "Asset Information," and more, offering a streamlined experience for IT professionals navigating complex data landscapes.

SYSTEM DESIGN



VERIFICATION

Testing was executed on a Nextcloud local host, encapsulated within a Docker container for streamlined deployment and reproducibility. Additionally, a dedicated Nextcloud server was established to host our Customized Kaseya VSA app, providing open access to users via the server's IP address. This approach allowed for broader testing and user engagement. Throughout the development process, real-time monitoring was achieved by running the code on the Nextcloud local host. Collaborative development was facilitated through GitHub, where Git functionality enabled seamless code version management, pull requests, and collective review and improvement of project files. This meticulous verification process not only ensured the reliability of our solution but also fostered effective collaboration and continuous improvement throughout the development lifecycle.

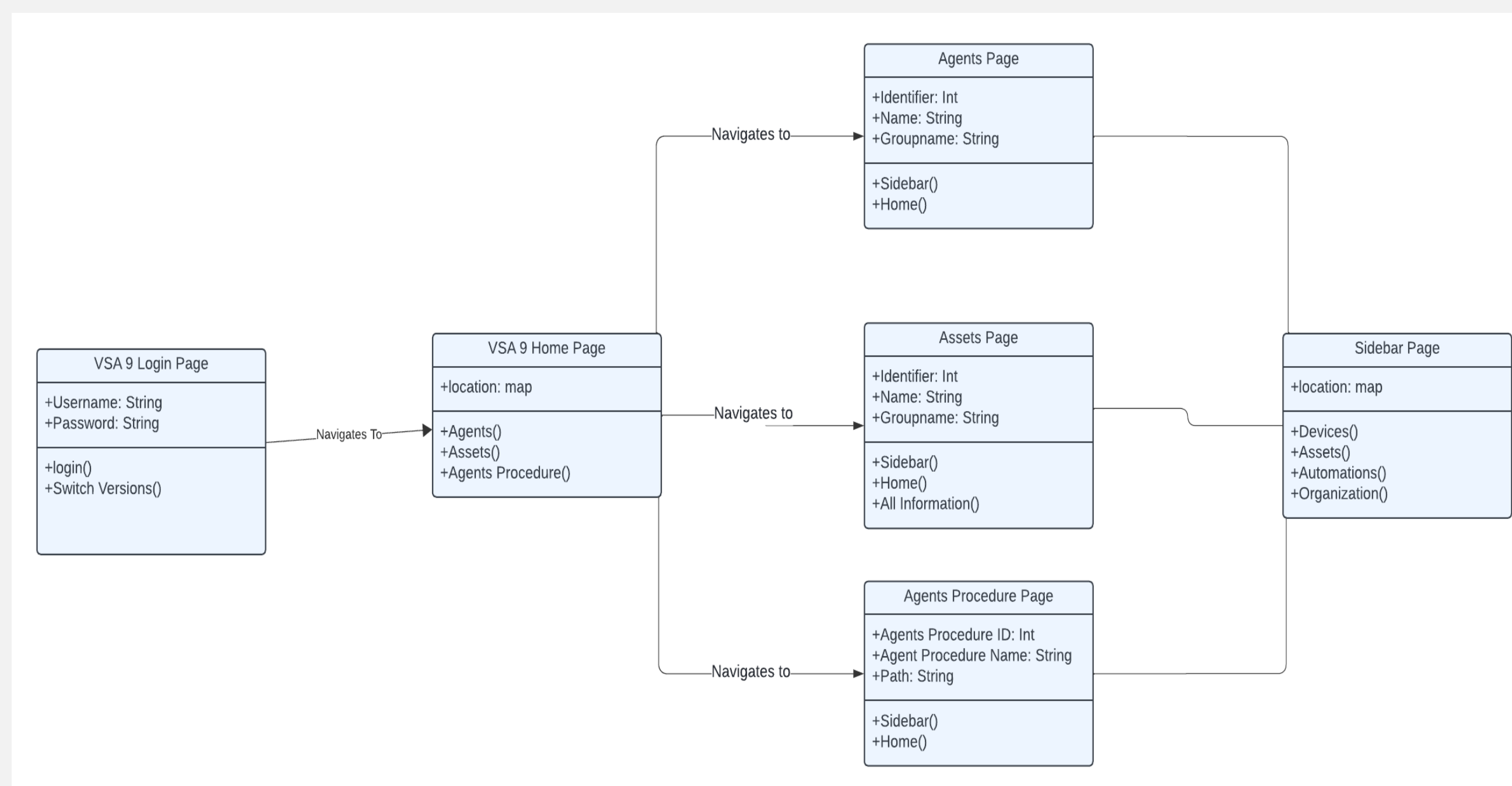
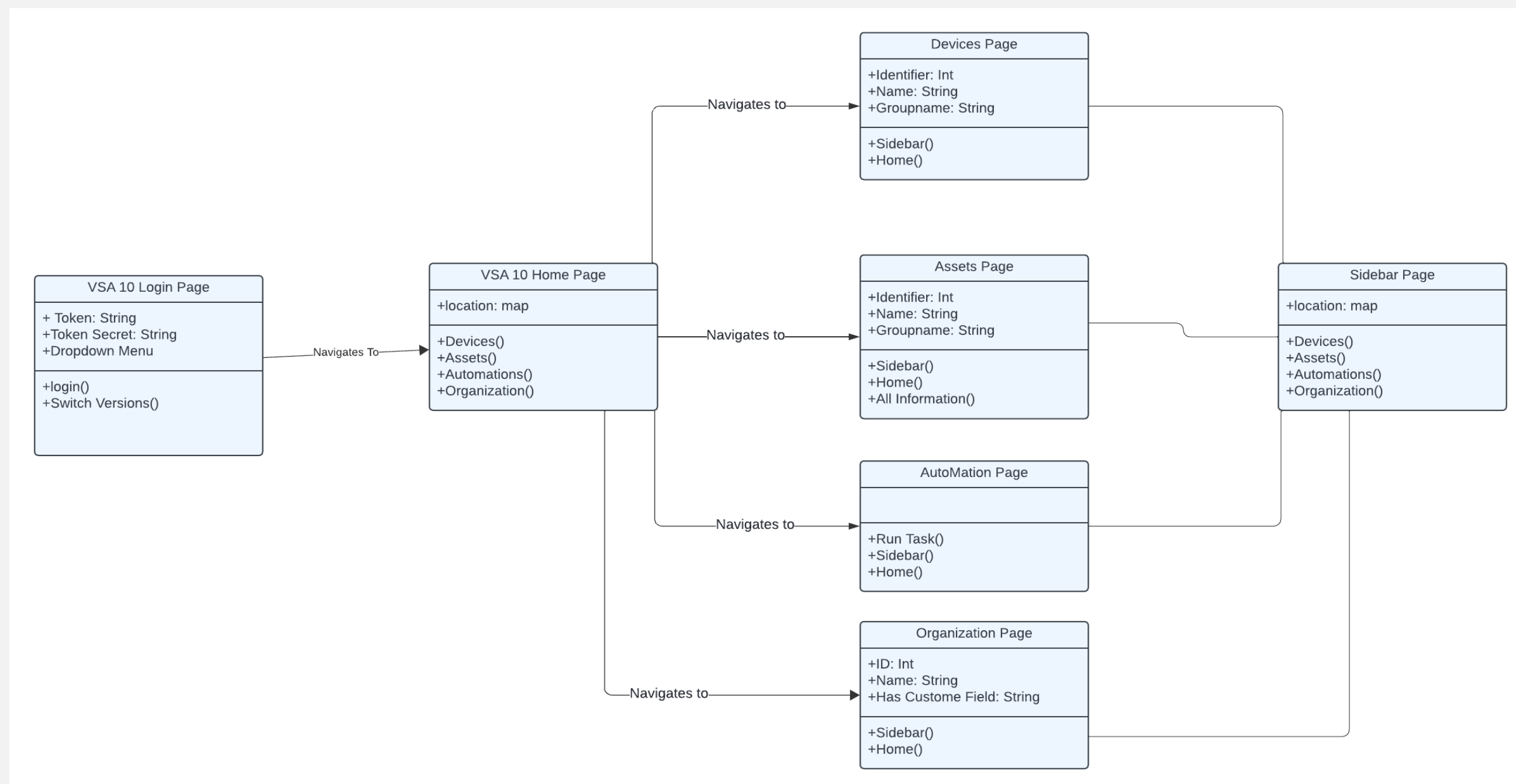
CURRENT SYSTEM

The initial release of the customized VSA introduces functionalities to enhance user experience:

1. Gain comprehensive insights into the agents operating within the VSA X environment.
2. Easily identify and track individual devices within the system.
3. Access details about the organization to which a particular device belongs.
4. Understand the group associations of devices, providing valuable context for efficient management.
5. Retrieve detailed information about a specific device, streamlining troubleshooting and management tasks.

The Current System offers users the ability to switch between VSA 9 and VSA X applications

OBJECT DESIGN



REQUIREMENTS

This semester-long endeavor was centered around the ambitious task of developing a bespoke Nextcloud app seamlessly integrated with Kaseya's VSA. The journey commenced with leveraging Kaseya's Rest API for both VSA 9 and VSA X. The primary objectives were twofold:

Authentication and Data Retrieval:

1. Utilize Kaseya's Rest API to authenticate and retrieve essential user information from both VSA 9 and VSA X environments.

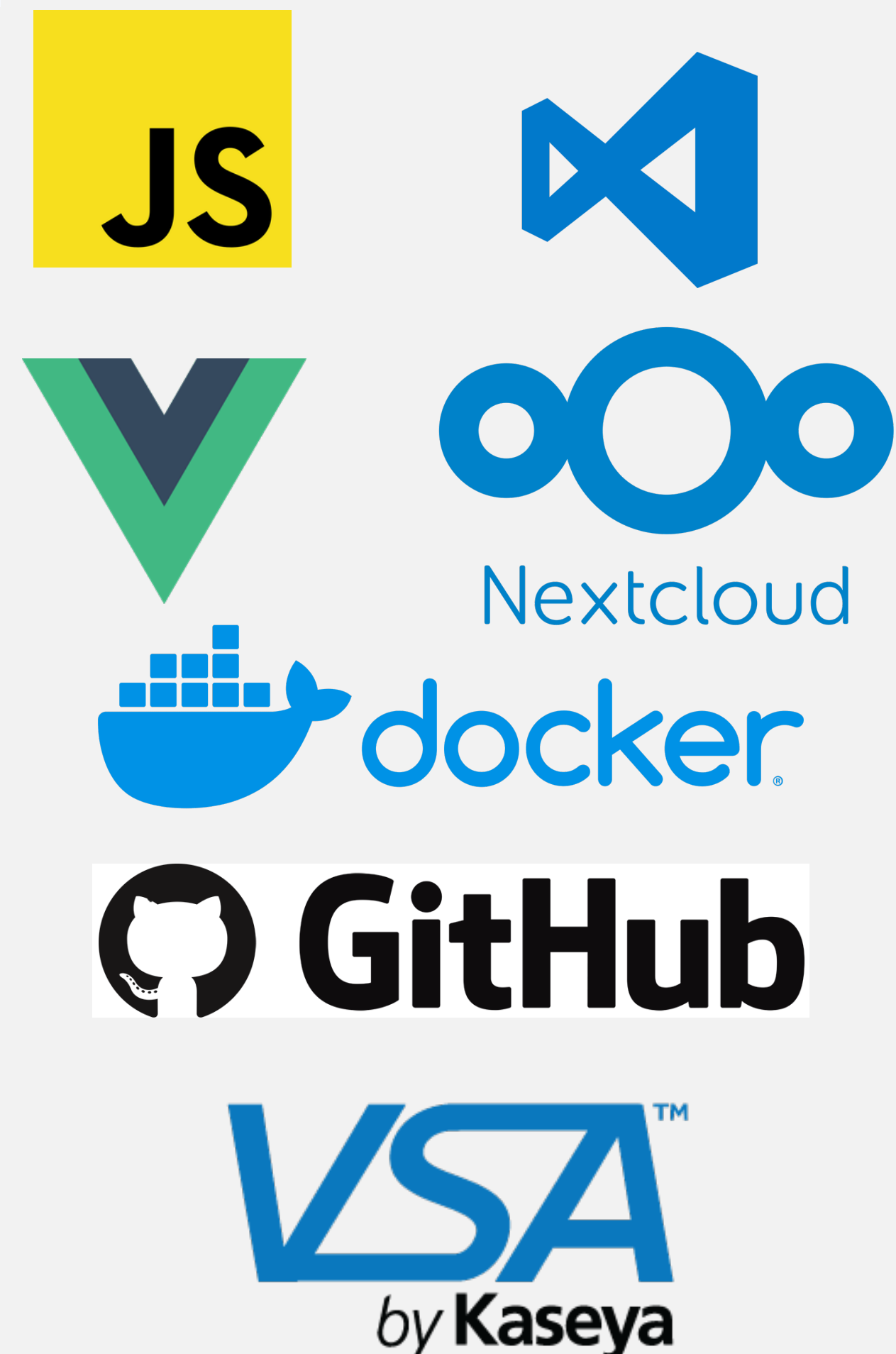
Intuitive User Interface (UI):

1. Engineer a user-friendly UI, simplifying interactions for users.
2. Transform this UI into a Nextcloud application, merging functionality with ease of use.

SUMMARY

This inaugural release of the Nextcloud App marks the initiation of our exploration into the integration with Kaseya VSA. From the ground up, we crafted a user interface, ensuring simplicity and ease of interaction, all the while intricately weaving Kaseya's Rest API into the fabric of our application. Being a part of this project, I gained invaluable insights into the complexities of UI design, API integration, and collaborative development. The journey allowed me to deepen my understanding of software architecture, real-time testing, and version control through platforms like GitHub. Overall, this experience has been a significant stepping stone, equipping me with practical skills and knowledge that extend far beyond the confines of this project.

IMPLEMENTATION



INDIVIDUAL CONTRIBUTUION

I spearheaded the integration of Kaseya's VSA X API into our application, a critical component achieved through meticulous collaboration with the Kaseya Rest API documentation. Using Visual Studio Code and leveraging JavaScript, I seamlessly linked the VSA X API to our application, incorporating my unique token ID, username, and API endpoint URL for secure and authenticated data retrieval. The implementation of VUE.js was pivotal in my contribution as I crafted an intuitive dashboard within the Nextcloud application. This dashboard serves as a user-friendly interface, elegantly presenting the integrated data from VSA X and VSA 9, ensuring accessibility and ease of navigation for end-users.



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ACKNOWLEDGEMENT

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