

Developer Operations for Collaborative Use of Tools & Service

Artic – DevOps, Organization: Artic-App(GitHub Organization)

Anway Somani, Nirupma Singh

Student, Assistant Professor

Bachelor of Computer Applications – Mobile Application & Cloud Technology

Ajeenkya DY Patil University, Pune

Abstract: Developer Operations is a crucial part for functioning of an organization. Multiple technologies are involved individually to maintain the workflow within the organization. This labour work is excessively demanded by several personalised technologies, that sometimes, it might result into error running. Such transitions do produce a disturbance to the current schedule, and act as a forfeit rather than a boon for consistency. The officials of any organization generally demand the workflow to be distributed over the same platform, thus increasing the build for smooth customer relationship, immediate action to events, communication between developers for different tokens, and many such tasks, thus increasing efficiency of workflow and without disruption in existing technology. This kind of technology is generally demanded to be applied for different project groups also.

1. Introduction

Artic-DevOps is a collaborative workflow application, which is responsible for keeping commit managing, as well as communication with the team for project updates. This application is designed entirely with the procedural thought of a project, and the current version of the application deals with the project management. Specifically targeting team members, the individuals can entirely depend on this application for outstanding updates as well as continuous updates made to any source of the project. Along with that, the individuals can also have access to communicate within the team for immediate response to several events that might act as ticket in any project. Thus, it provides communication via text messages, audio-visual calls, and via the committed updates made to any project.

2. Terminology Used

- IRC: Internet Relay Chat
- CRM: Customer-Relationship Model
- ITIL: Information Technology Infrastructure Library
- API: Application Programming Interface
- RWD: Responsive Web Design
- SDK: Software Development Kit
- Ticket: Zendesk support requester for application interface

3. Literature Review

Artic-DevOps is an expansive domain for application usage. Its implementation will act as a subsidiary to the current existing Slack platform, where developers, team members, as well as other team individuals interact via the means of same platform, mostly depending on the IRC for execution of communication. Slack is a very popular application, publicised and used widely in most of the largest companies of the world, requiring its implementation. Several alternatives of Slack do exist, but in the form of individual featured applications, like Google Hangouts(focusing only on messaging via direct communication), Cisco Spark(focused on Visual Communication), Work zone(featured for project updates), and many such more. Several larger organizations do use their own platform for project management. Thus, implementation of Artic-DevOps will act as a platform to share and communicate for project management via single application.

4. **Research Hypothesis**

The current situation exhibits the usage of simple Slack application for transit communication, and to which the alternative for usage of multiple application lies. Thus, Artic-DevOps will be an integrated API application, guaranting interface to perform multiple actions within the same application.

5. **Existing Competitors for Artic-DevOps**

The current vendors for Developer Operations application are listed below:

- Slack
- Jostle
- Hive
- Workplace by Facebook
- Fuze
- Glip
- Stride

6. **Features of Artic-DevOps**

- Text messaging communication via Chat API for DevOps.
- Voice Calling communication for developers' interaction, as well as cleared vision for project review(on engaged).
- Video Calling API fetched from external organization, for communication via visuals.
- GitHub API integration via web view for project management console.
- Individual user control for member access.
- Tag management for project reviews and updates.

7. **Technology Engaged**

- Android SDK
- Java
- HTML/CSS
- Python
- XML
- RWD

8. **Project Licenses**

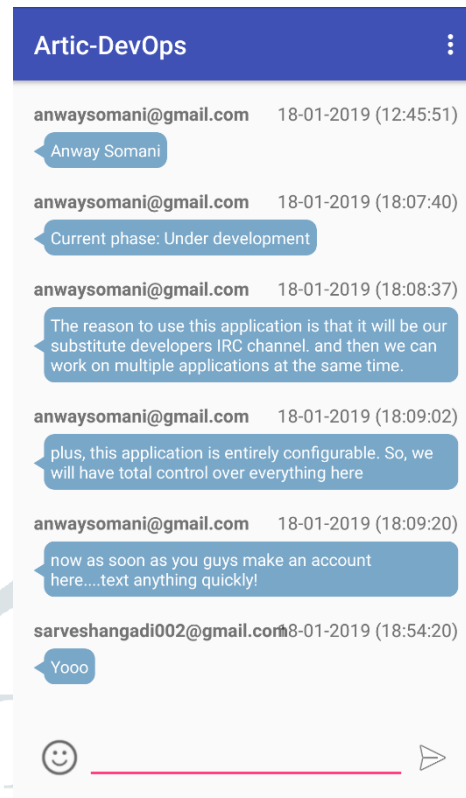
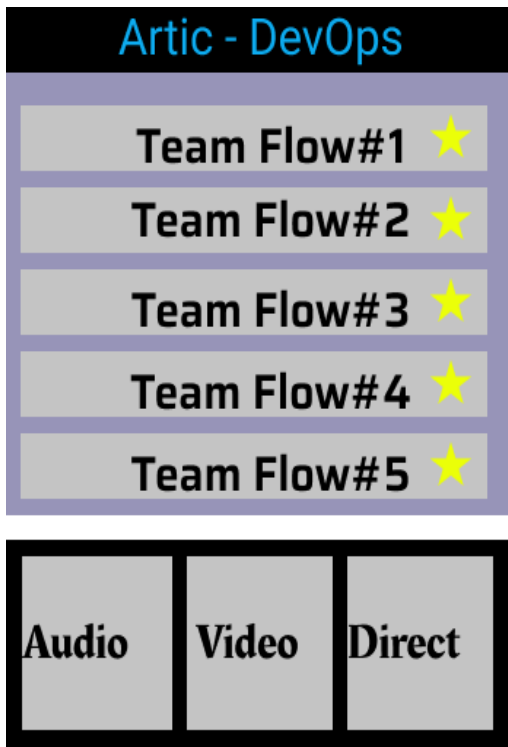
- Academic Free License v3.0(*afl-3.0*)
- Apache License 2.0(*apache-2.0*)
- BSD 2-clause "Simplified" License(*bsd-2-clause*)
- General GNU Public License v2.0(*gpl-2.0*)
- MIT License(*mit*)
- Open Software License 2.9(*osl-3.0*)

9. **Project Scope**

The application is aimed to provide assistance for project development track records, and team enhancement with the aspect of implementation in organizations and projects. The product is aimed for expansive scope of different types of project, and their approach methodology for the ITIL in CRM via responsive method to open tickets, as well as immediate approach to procedures, and feedbacks.

10. **Deployment Strategy**

The application implementation involves execution of several features on regular basis, to cope up with issues and introduce new features to the customers of DevOps application. Several strategies need to be planned for each execution version, to keep the customers using the application, even after a major update in the platform.



11. References

☒ Weblinks:

- <https://slack.com/apps/A3PU3V3NG-docs>
- <https://support.google.com/hangouts/?hl=en#topic=6386410>
- <https://rocket.chat/docs/>
- <https://docs.mattermost.com/>

☒ Tickets:

- <https://slack.com/solutions/information-technology>
- <https://forums.rocket.chat/t/support-tickets/674>

☒ Books:

- Creativity Inc: Overcoming the Unseen Forces that Stand in the Way of True Inspiration – Ed Catmull, Amy Wallace(2014)
- Sprint: How to Solve Big Problems and Test New Ideas in Just Five Days – Jake Knapp(2016)