Competition

Tasker (Android)

[Tasker](#) is an application for Android which performs tasks (sets of actions) based on contexts (application, time, date, location, event, gesture) in user-defined profiles or in clickable or timer home screen widgets.

Distinctive factors

1. Tasker charges its user for using their service (i.e. the app needs to be purchased).

2. Tasker is limited only to the Android OS.

3. Tasker works on individual devices i.e., it does not have the log in feature.

User impact

1. Orchestra is a web application while Tasker is a mobile app for Android OS.

2. Orchestra allows registered users to access their profiles on different devices while Tasker does not have the account feature.

Automate by LlamaLab (Android)

[Automate](#) lets you automate various tasks on your smartphone or tablet. Create your automations using flowcharts, make your device automatically change settings like Bluetooth, Wi-Fi, NFC, or perform actions like sending SMS, e-mail, based on your location, time of day, or any other "event trigger".

Distinctive factors

1. Automate is a mobile application that is installed directly onto a device served by the Google Play Store, while our app is a web application which informs corresponding programs/services installed on devices to download and perform the tasks of community written bots/plugins.

2. Represents task automation code as conditional workflow diagrams, where the source code of each workflow or bot/plugin isn't accessible to its users, while our app provides a direct view of the source codes for every community written bot/plugin.

3. Requires an additional supplemental network application to be installed (i.e. Automate Network Permissions) alongside the automation app itself.

User impact

1. Users with various devices would love to have a common application to handle automation on all their devices, including IoT (i.e. not just their smartphone with Automate).

2. Our application allows developers to create automated bots for all sorts of devices.

MacroDroid (Android)

MacroDroid is the easiest way to automate tasks on your Android smartphone or tablet. Via the straightforward user interface MacroDroid makes it possible to build fully automated tasks in just a few taps.

Distinctive factors

1. As Automate, MacroDroid is a mobile application.

2. Represents task automation as sequences of selection menus that allow for the creation of an automation task, all as part of the process of specifying the task's trigger, actions, and/or constraints, while our app

provides a code editor as part of its web UI, where any user can rather add the code required for their automation task, and sync it with a Github repository that houses the code for public display, which is cloned and compiled for use by automation users.

3. Requires no programming experience from the perspective of the user, while our app requires novice to advanced programming experience in potentially multiple programming languages.

User impact

1. Users are completely unaware of the nature of the code that MacroDroid is executing on their device

2. Users are restricted to elaborate/build upon the automation tasks that're provided upon the installation of MacroDroid

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Power Automate by Microsoft (Windows)

Power Automate is a tool built into Windows 11 for automating workflows. It has deep integration with other Microsoft products. Primarily built for enterprise use, for example automating large-scale princesses (like copy pasting customer details)

Distinctive factors

1. Orchestra is a web app, not built into any OS.

2. Power Automate has no calendar functionality

3. Power Automate has deep integration with windows and has lots of easy to use pre-built tools

4. Power Automate has no server integration, tasks are created, launched, and managed all on the same machine

5. Power Automate does not have a marketplace for sharing workflows

User impact

1. Orchestra is better suited to IoT integration, as device status is reported

2. Orchestra is better for mobile users, as Power Automate has no mobile component, and Orchestra users can manage their profile from anywhere.

Shortcuts (iOS)

[Shortcuts](#) is a visual scripting application developed by Apple and provided on their iOS, iPadOS, macOS, and watchOS operating systems. It allows users to create macros for executing specific tasks on their device. These task sequences can be created by the user and shared online through iCloud.

Distinctive factors

1. The automated tasks are only related to apple ecosystem.

2. As a user, I can only automate tasks from a set of concrete actions fixed by the Apple developers.

User impact

1. Our product allows users to give feedback on their experience allowing developers to improve and know their customer experience.

2. For busy users, our product allows them to view in advance about their upcoming automation.

Users

For every mentioned app, users are initially determined by their OS and whether or not the application provides support for their OS. Furthermore, the users can come from all different age groups and industries, however, Orchestra would draw a line between the users that can and cannot program, since having this capability with Orchestra makes it unique from every other app in the market. Changes directly to a bot's source code can be made to further suit one's needs however they wish, not subject to pre-installed accessibility constraints, making the scenarios of use for such individuals limited only by their hardware. Otherwise, Orchestra users would have just as rich as of an experience as they would with any other app, as long as the developer community builds for the same functionalities that come preinstalled for apps like MacroDroid. If our app's competitors took the same approach as us, they would need to settle matters like where source code should be made accessible and how exactly program building/compilation would be handled within the context of their application. Like any additional functionalities, these too would require additional time and resources to implement, meaning competitors may have not thought of these possibilities or seized their efforts.