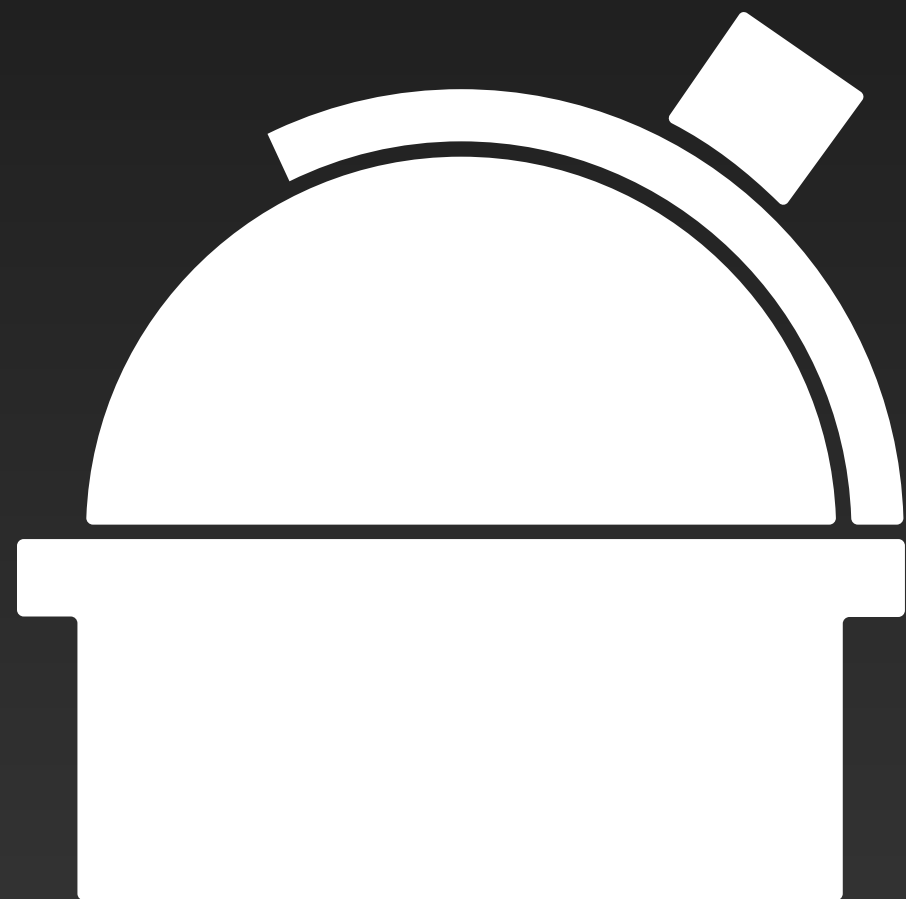


Project Orion

A Wi-Fi OPTIMIZATION APP

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Orion Constellation



What is Orion?

- Orion is a Wi-Fi optimization app for Android.
- The App aims at increasing Wi-Fi performance for users who have more than one wireless network in the same area.
- These users want more efficient and more stable wireless network connections.
- The application has the ability to switch to the Wi-Fi which has the strongest signal without needing manual intervention.
- At the same time, the app tries to run with low battery consumption as much as possible.

Main Functional Requirements

- The device's operating system must be Android.
- Permissions must be given as described below:
 - File Read and Write Permission
 - Wi-Fi Management Permission
- Android version must be at least 10 in order to use dark theme.

Main Functional Requirements

- User should be able to see signal strengths, SSIDs and BSSIDs from “Wi-Fi List” menu.
- User should be able to set priority of stations and set the range from the “List of Conditions” menu.
- User should be able to change the theme and set the checking rate from “Settings” menu.

Non-Functional Requirements

- Security
- Efficiency
- Privacy
- Compatibility
- Performance
- Manageability

Highlights of Product Backlog

Pre-Conditions	Post Conditions
User must give permission to manage the Wi-Fi network control.	User can set the range according to dBm values on Wi-Fi list.
User must check the set priority box.	The application connects to the prioritized Wi-Fi's first.
User must enter a value (sec/check).	Application will work periodically depending on the input value.
User must have at least Android 10 to use the dark theme.	The application runs with dark theme.

6:09

Wi-Fi List

TP-Link TD854W 00:0a:95:9d:68:16	Strength: Excellent RSSI: -48 dBm
AirTies RT-206 e8:0a:45:9c:38:16	Strength: Good RSSI: -70 dBm
TP-Link TD-8980 10:0a:12:5e:38:17	Strength: Bad RSSI: -99 dBm

Conditions

List Wi-Fi

Settings

6:13

Settings

Dark Theme

Set Frequency of Checking

(seconds / check)

Conditions

List Wi-Fi

Settings

6:10

Conditions

Select Wi-Fi

Set Priority

Set Range

dBm

-

dBm

Conditions

List Wi-Fi

Settings

First Sprint Table

1st Sprint (Backlog)	2nd Sprint (Developing and In-Process)	3rd Sprint (Completed)
More Compatibility for Other Themes for Old Android Versions	User Manual for the First Time Users (Ahmet)	User Interface Design (İlker)
Range Recommendation System	Connectivity Area can be marked by user with Map (İlker)	Listing Wi-Fi Stations and Their Information (Ahmet)
	Default 'Frequency of Checking' Value (Ozan)	Setting Range of the Signal Strength and Prioritizing Wi-Fi Stations (Ahmet)
		Battery Usage Optimization (Ozan)

Inferences

- We have improved our Collaboration Skills.
- We have seen that the users have more specific demands about the application.
- We realized how ruthless business life is.

Thanks for Watching and Listening Us

<https://github.com/Anunlu/Project-Orion>