

“The Hub” – Circadian clock calibrator

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About Project

The purpose of the device would be to help individual to prepare and adjust for travel to a different time zone and avoid jet lag. That is done by collecting persons daily wake up times and calculating future sleep pattern according to time zone selected.

The device would act as an alarm that controls the light in the bedroom, gathers wake up data and shows current weather data on screen for informational purposes. Notifications will be sent to the user about when to prepare to sleep and other tips.

User will have a web app where the destination and time of travel can be selected. Also light and alarm settings would be on it.

Tools, Technologies and Equipment

I am planning to use: Raspberry Pi, speaker, wifi light bulb, small screen to display weather.

A web app (probably in JavaScript) will be created for user to control the alarm/light. Raspberry Pi will have programs written in Python to control the speaker and the light bulb. There will some data calculations done and email notifications sent to the user.

Project Repository

<https://github.com/ArunasJok/The-Hub.git>