

Greens: The simple hourly wage tracker

<https://github.com/jaw12346/Greens-Hourly-Wage-Tracker>



Description:

Greens is a proposed application that can assist hourly workers in understanding their actual take-home pay before the end of their pay period. As an hourly worker, it can be hard to track how much you're actually making after-tax in a way you can plan for in advance, but with Greens your state and federal income tax deductions are calculated automatically minute-by-minute as you're on your shift.

The initial release of this application will only support single filers (with and without dependents or even being a dependent themselves) in the state of New York, but with some careful data collection from state tax collection offices, this can easily be expanded out to all 50 states.

Greens will never upload any of a user's information to the cloud and will have completely free and open-source code to ensure the privacy of some of a user's most private financial information. After entering only a few values into the app, any single filer in NY will be able to calculate their real take-home earnings in a flash!

Sample Prototypes:

A digital prototype of the 'START SHIFT' screen. It features a green background with white text. At the top, a large number '\$152.13' is displayed, with '\$13.20 / \$15.00' below it. Underneath is the text 'Earned income since (mm/yy)' followed by '\$175.15'. Below that is 'State (NY) tax deducted' followed by '\$11.51', and 'Federal tax deducted' followed by '\$11.51'. At the bottom, there is a green button labeled 'START SHIFT' and a smaller white button labeled 'Settings'.A digital prototype of the 'END SHIFT' screen. It features a green background with white text. At the top, a large number '\$184.92' is displayed, with '\$13.20 / \$15.00' below it. Underneath is the text 'Earned income since (mm/yy)' followed by '\$210.59'. Below that is 'State (NY) tax deducted' followed by '\$12.84', and 'Federal tax deducted' followed by '\$12.84'. At the bottom, there is a red button labeled 'END SHIFT' and a smaller white button labeled 'Settings'.A hand-drawn sketch of the app interface on lined paper. It shows a smartphone screen with a list of items: 1. \$150.11, 2. \$10.00/hr, 3. \$13.20/hr, 4. Earned this Period: \$..., 5. Fed. Tax this Period: \$..., 6. State Tax this Period: \$..., and an 'Update Settings' button. Below the sketch, there are numbered annotations: 1. Current Pay Period balance after tax, 2. Balance acts as a constantly updating 'money stopwatch', 3. Pre-tax income this pay period, 4. Hourly wage after tax, 5. state and federal tax burden this period, 6. Hourly wage before tax.

Goals:

- Complete Java → Kotlin tutorials provided by JetBrains and Google to determine the best language to use for app development.
- Learn basic Android app development using Kotlin and/or Java.
- Collect tax calculation information from the IRS and NYS websites into an easily searchable format.
- Implement shift entry with a toggle on/off button to be pressed at the beginning and end of each shift, with the hopes of implementing a scheduler.
- Implement the “money stopwatch” with animation for a constantly updating visual representation of taxed income.
- Determine what “variables” are required to determine an hourly worker’s tax burden, along with determining the functionality if a worker rises into a higher tax bracket both on the state and federal level.

Milestones:

End of June

- Complete “Kotlin for Java programmers” esque tutorials.
- Collect tax calculation information from the IRS and NYS websites
- Determine the “variables” required for simple calculation of an hourly worker’s tax burden

July

- Start development of the app:
 - Develop basic non-animated user interface for the main screen
 - Work on developing the settings interface
 - Implement the on/off button for shifts
- Working interface for single filers with/without dependents

August

- Implement the animated “money stopwatch”
- Allow for dependents to be declared as single filers
- More complex settings or migration of tax “variables” to a longer-term database or data structure to allow for future expansion into more states
- Determine the feasibility of a home screen widget

Stack

- Kotlin or Java – Undetermined at this time
 - Determination will be made based off of availability of introductory app development resources and my ability to learn Kotlin from my knowledge of Java

Team Members:

Just me – Jacob Weber 😊