

Timer

Create a new project called Timer*, where the asterisk is replaced by your last name. When you complete this project, generate the “Share” link through Thunkable, and submit it on TEAMS as a comment. If you work in Android Studio or XCode, zip up everything associated with the project and submit that.

In this project, you will create an app similar to the Clock on your iPhone, where a user can select from several time-based functions. You will work with at least two partners, with each partner responsible for a particular function. In general, **the layout of the user interface is up to you**, but the purpose of this assignment is to familiarize yourself with some of the most useful ways the Timer sensor can be incorporated into apps.

I will be looking for a few general requirements:

- Include the ‘Start’ or ‘Open’ method code for Screen1. On this block, write a comment outlining the key functions of your app, “extra” behavior you’ve included, and any limitations still be present
- Ensure your app’s components have sensible names for what they are
- Allow the user a simple way to switch between time-based functions (look at the Navigators!)
- Implement (as an individual) at least one of the time-based functions described below. You will then collect these functions with your group members’ distinctly-different functions into a single application
 - It is important during this project to **maintain communication with your group**. Integrating your applications will be significantly-easier at the end of this process if you can avoid common variable/component/screen names, but can maintain common design and aesthetic features.
- The user interface should be to some degree above-and-beyond aesthetically-pleasing for full credit.
- Bugs should be documented and/or error-checked for full credit.
- Lists, loops, variables, and/or procedures should simplify the app’s code (if applicable)
- There are several possibilities for time-based functions:
 - Real-world clock time – retrieve the true time AND DATE within the user’s time zone. See <http://worldclockapi.com> or an alternative
 - Stopwatch – counts upward, can include lap-recording and reset functionality
 - Timer – counts downward from user-input hour/minute/second data
 - Alarm – sounds an alarm and/or vibrates at a user-input time (please note app would have to remain open for this to be a viable Thunkable creation)
 - Interval Timer – user inputs a second amount for work, second amount for rest, and number of repetitions; app alternates timer functionality in intervals of work then rest for that many repetitions