Pass Task 4.1 Workout Timer App task

Subtask 1: UI Design

The first step is to design the user interface for the app. The UI should allow the user to set the duration of the workout and the rest periods between sets, as well as start and stop the timer. You can use XML layouts to create the UI, which may include the following components:

- TextViews to display the current time remaining for each phase (workout and rest)
- EditTexts to allow the user to set the duration of the workout and the rest periods
- Buttons to start and stop the timer
- ProgressBar to show the progress of the current phase

You may also want to consider using custom fonts, colors, and images to make the UI more visually appealing.

Subtask 2: Timer Functionality

The next step is to implement the timer functionality. This can be done using a CountDownTimer, which is a built-in Android class that provides a simple interface for running a timer in the background. You will need to create a new instance of CountDownTimer for each phase (workout and rest) and start and stop the timers as appropriate.

To update the UI with the current time remaining, you can use a Handler and a Runnable that is called periodically to update the TextViews and ProgressBar. You can also play a sound or vibrate the device when each phase ends to alert the user.

Additional sub-task for SIT708 students

Subtask 3: Notifications

In addition to sound and vibration, you can also use notifications to alert the user when each phase ends. You can use the NotificationCompat.Builder class to create a notification with a custom title, message, and icon, and show the notification using the NotificationManager. You can also add actions to the notification (e.g., "Stop Timer") to allow the user to interact with the app without opening it.

Submission Details:

1. You must ensure that all your project files used for this task sit in a directory called “Task 4.1”.
2. All files (including ways for employing machine learning in this developed app) are required to be uploaded and a link to the “Task 4.1” directory submitted to OnTrack.
3. Please make sure that unit chair and tutor have access to the folder.
4. A link to the demo video of your app running must be submitted by using the task submission page to OnTrack.
5. Submit your GitHub link and your MainActivity file to Ontrack.
6. It would be great if you could submit the screenshot of the main app screen.
7. This is an **individual** assignment, and you should submit **it by 8 pm AEST, Friday, Week 6.**