A SLEEP TRACKING APP FOR A BETTER NIGHT'S REST

PRESENTED BY :

LOGESWARAN B

MUTHUPANDIYAN K

PROJECT OVERVIEW :

Sleep Track is a mobile application designed to help users monitor and improve their sleep quality through personalized insights and recommendations. By tracking sleep patterns, providing educational resources, and offering tools for relaxation, SleepTrack aims to empower users to achieve restorative sleep and enhance their overall well-being.

OBJECTIVES :

- **Track Sleep Patterns**: Allow users to log their sleep duration, quality, and any disturbances.
- **Analyze Sleep Data**: Use algorithms to analyze sleep trends and provide insights into users' sleep habits.
- **Personalized Recommendations**: Offer tailored advice for improving sleep based on individual data.
- **Educational Resources**: Provide articles, tips, and videos on sleep hygiene and relaxation techniques.
- **Integration with Wearables**: Sync with wearable devices (like smartwatches and fitness trackers) for automatic sleep tracking.

KEY FEATURES :

- **User Profiles**: Users can create profiles to log sleep data, set sleep goals, and track progress over time.
- **Sleep Journal**: A feature that allows users to record their sleep experiences, including pre-sleep activities, stress levels, and caffeine intake.
- **Sleep Analysis**: Visualizations of sleep patterns over time, including duration, quality, and disturbances.
- **Relaxation Tools**: Guided meditations, calming music, and breathing exercises to help users wind down before sleep.

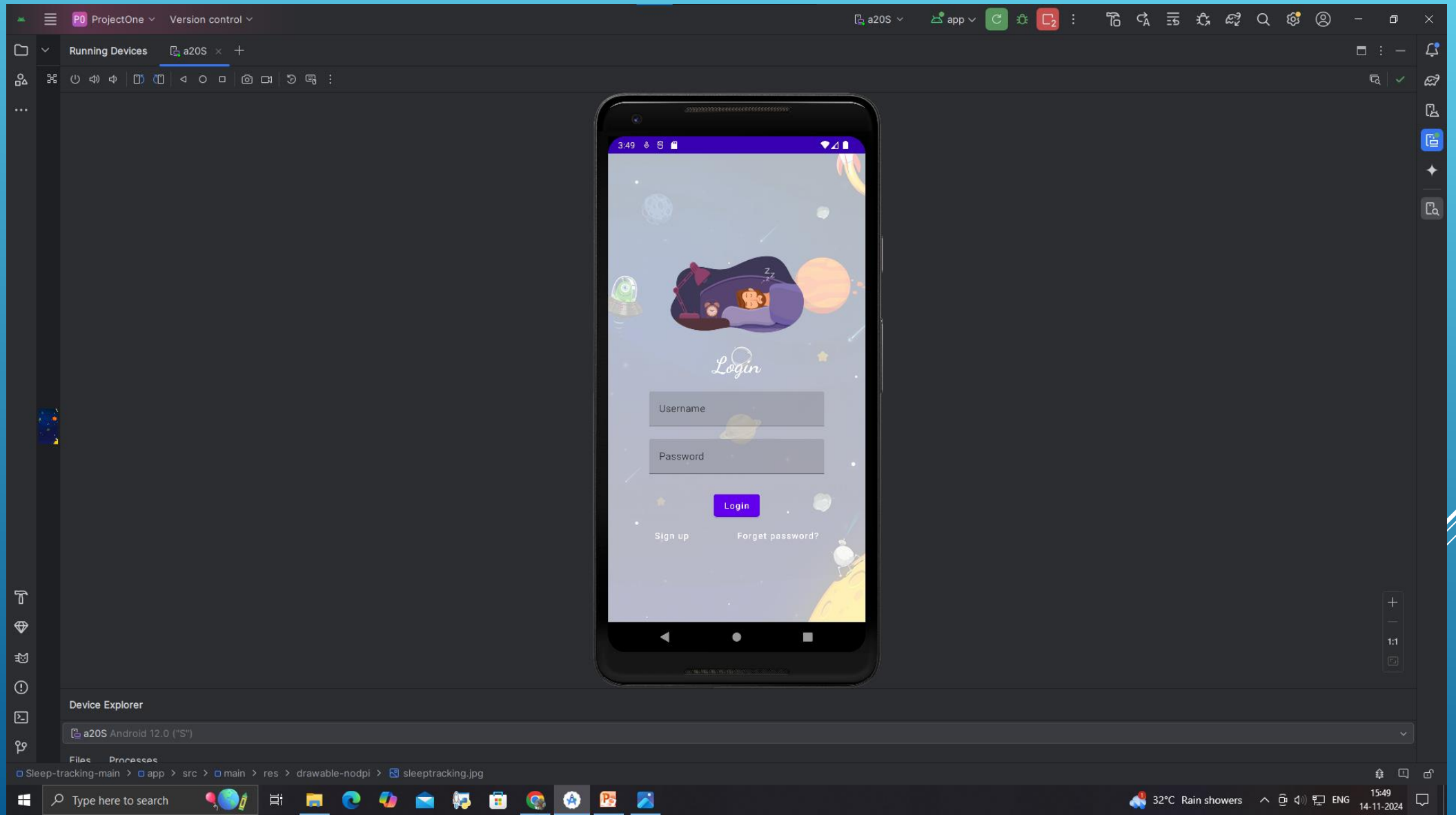
- **Smart Alarm**: An intelligent alarm that wakes users during light sleep phases for a more refreshing experience.
- **Community Forum**: A space for users to share experiences, tips, and support with each other.
- **Reminders & Notifications**: Gentle nudges to maintain a consistent sleep schedule and healthy sleep habits.
- Target Audience
- **General Public**: Individuals looking to improve their sleep quality and overall health.
- **Students**: Those managing busy schedules and seeking effective sleep strategies.
- **Professionals**: Individuals with demanding jobs who may experience sleep disturbances.

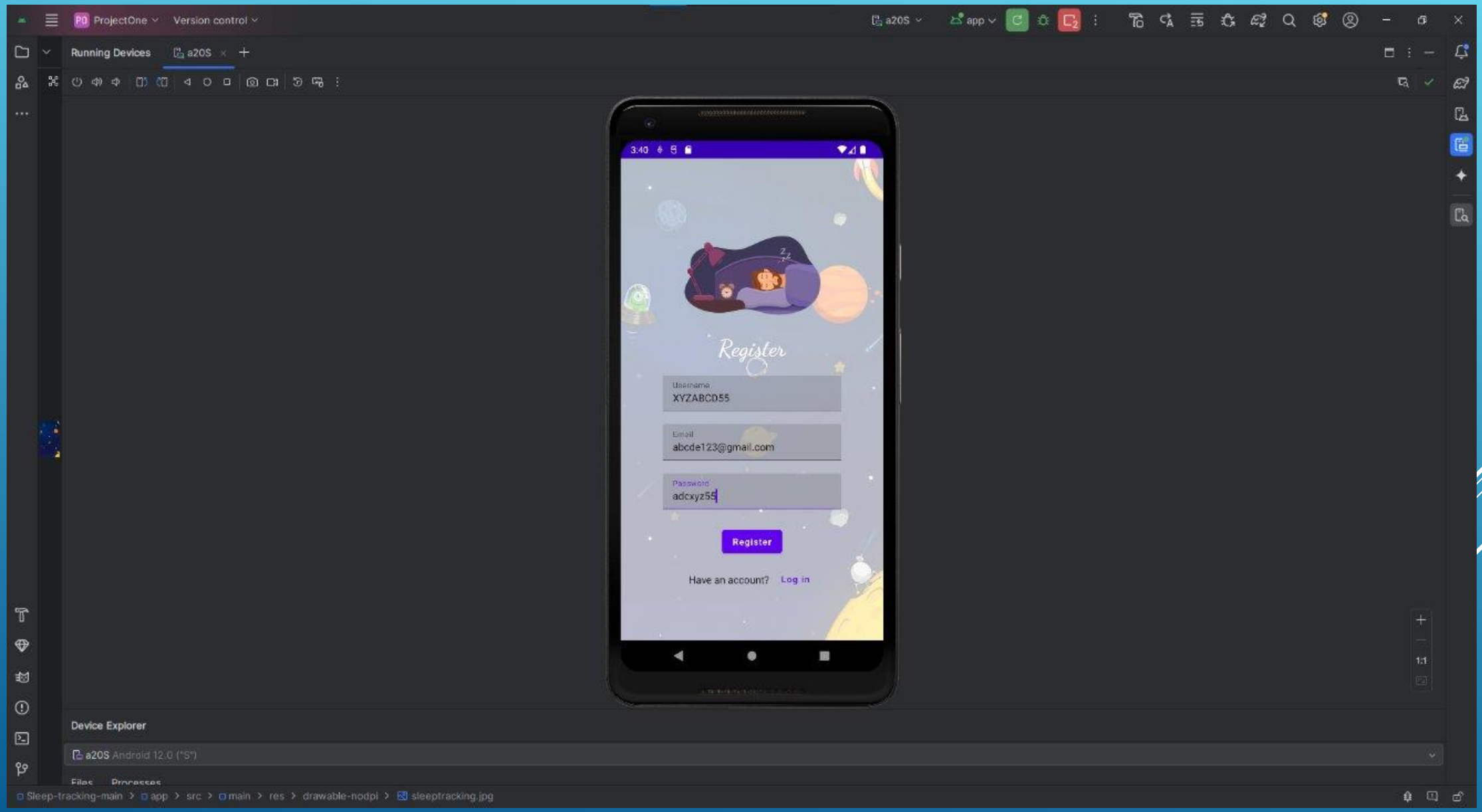
CODE :

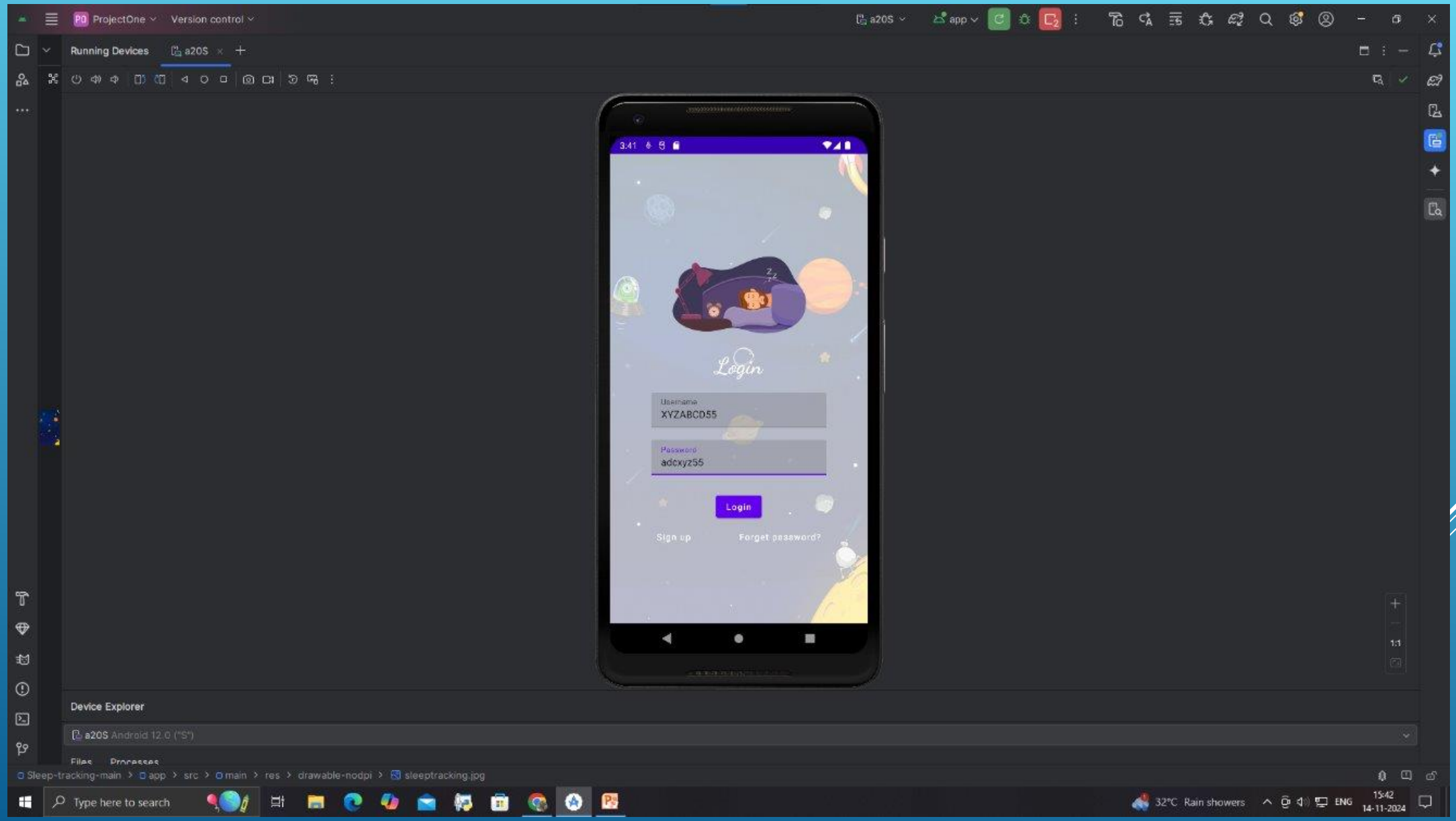
```
package com.example.projectone


import android.content.Context
import androidx.room.Database
import androidx.room.Room
import androidx.room.RoomDatabase


@Database(entities = [TimeLog::class], version = 1, exportSchema =
false)
abstract class AppDatabase : RoomDatabase() {
  abstract fun timeLogDao(): TimeLogDao
```

```
    companion object {
        private var INSTANCE: AppDatabase? = null

        fun getDatabase(context: Context):
AppDatabase {
            val tempInstance = INSTANCE
            if (tempInstance != null) {
                return tempInstance
            }
            synchronized(this) {
                val instance = Room.databaseBuilder(
                    context.applicationContext,
                    AppDatabase::class.java,
                    "app_database"
                ).build()
                INSTANCE = instance
                return instance
            }
        }
    }
}
```

OUTPUT :


ProjectOne
Version control
a20S
app
Running Devices
a20S
3:49
Login
Username
Password
Login
Sign up
Forget password?
Device Explorer
a20S Android 12.0 ("S")
Files
Processes
Sleep-tracking-main
app
src
main
res
drawable-nodpi
sleeptracking.jpg
Type here to search
32°C Rain showers
ENG
15:49
14-11-2024


ProjectOne
Version control
a20S
app
Running Devices
a20S
3:40
Register
Username
XYZABCD55
Email
abcde123@gmail.com
Password
adcxyz55
Register
Have an account? Log in
Device Explorer
a20S Android 12.0 ("S")
Files
Processes
Sleep-tracking-main
app
src
main
res
drawable-nodpi
sleeptracking.jpg


ProjectOne
Version control
Running Devices
a20S
app
3.41
Login
Username
XYZABCD55
Password
adcxyz55
Login
Sign up
Forget password?
Device Explorer
a20S Android 12.0 ("S")
Files
Processes
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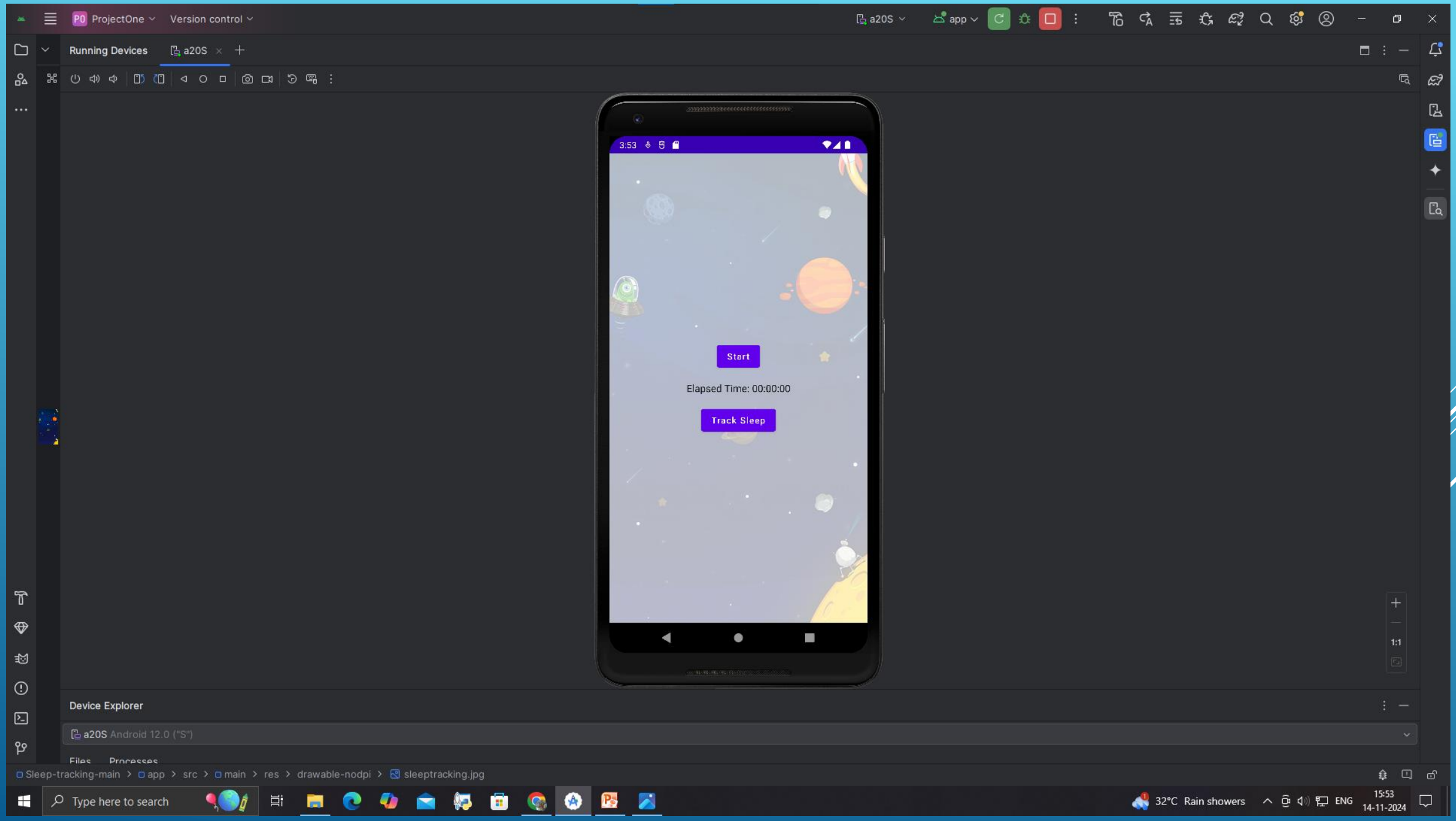
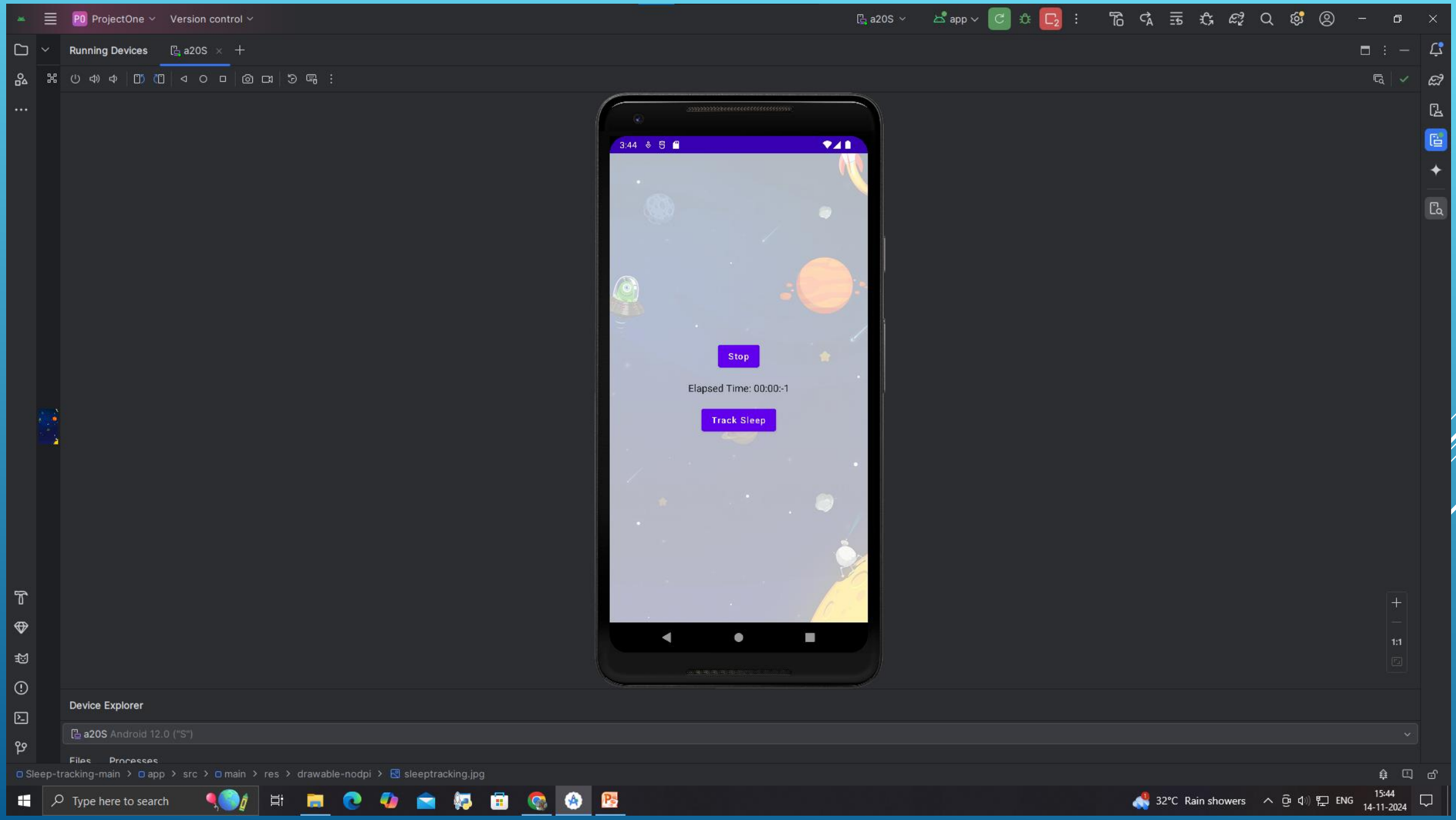
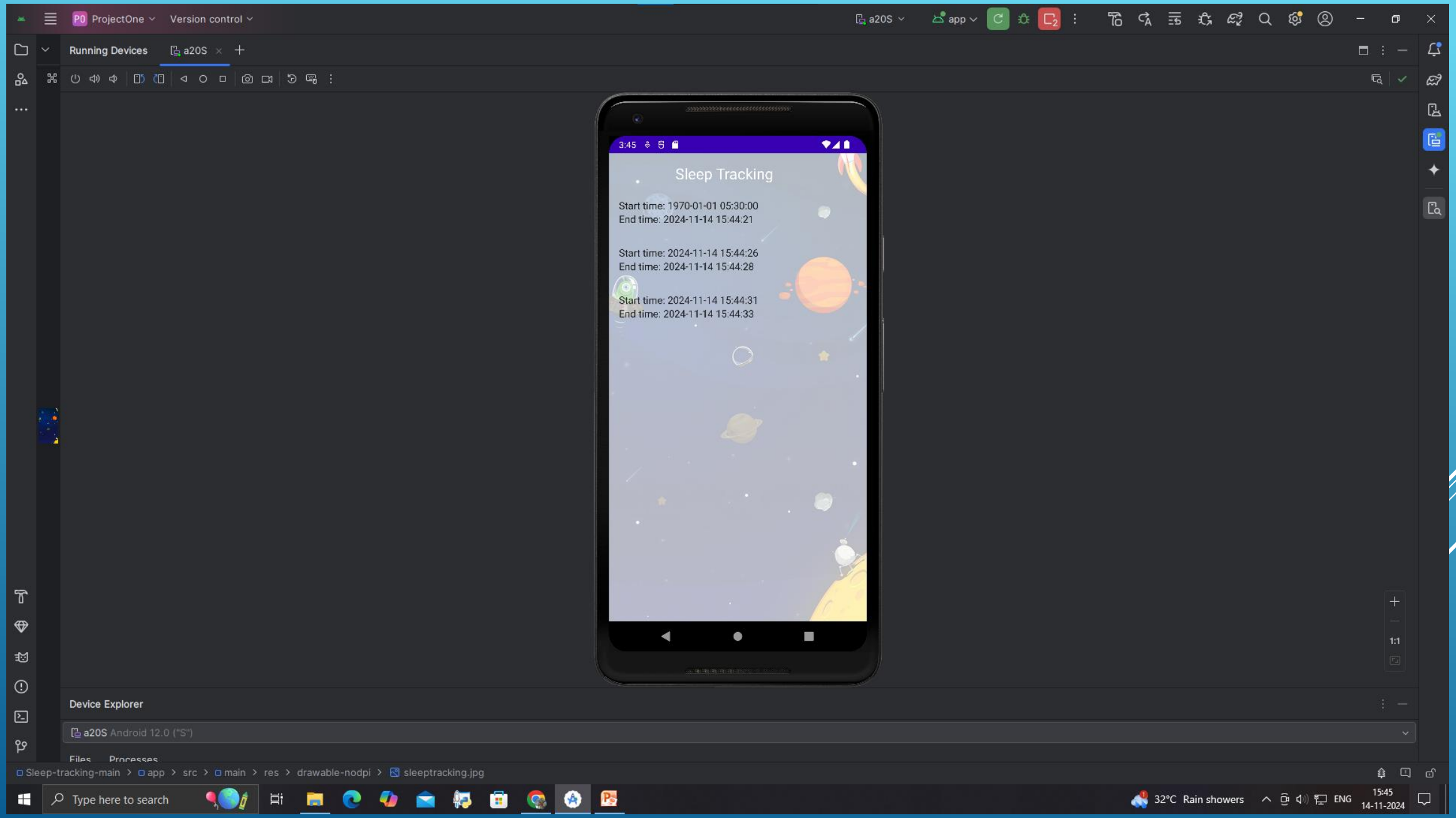
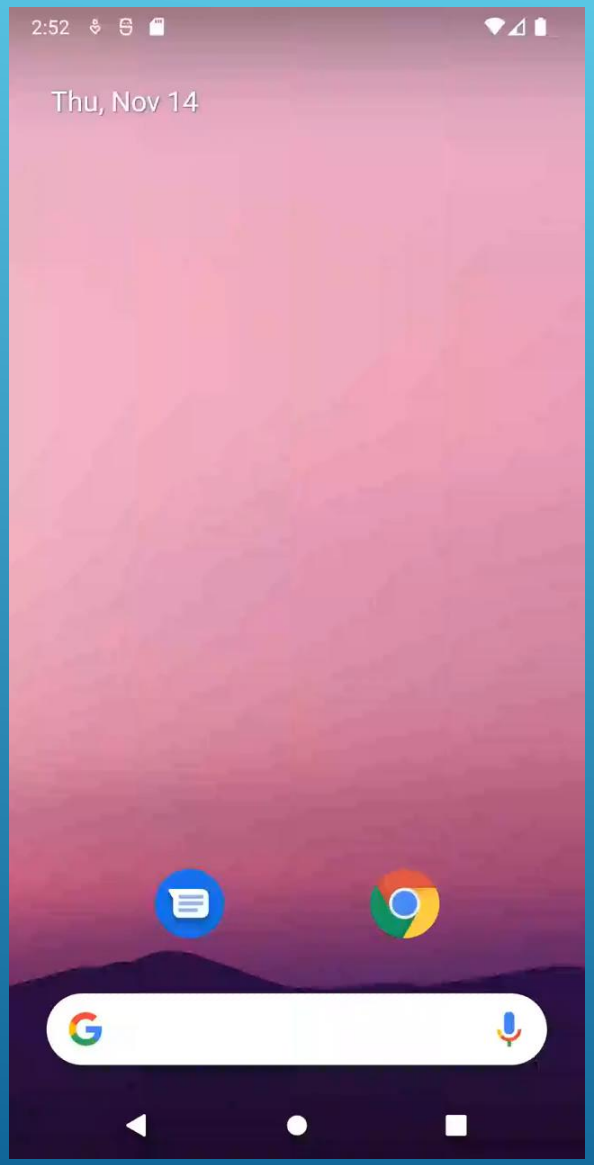
src
main
res
drawable-nodpi
sleeptracking.jpg
Type here to search
32°C Rain showers
ENG
15:42
14-11-2024


ProjectOne
Version control
a20S
app
Running Devices
a20S
3:53
Start
Elapsed Time: 00:00:00
Track Sleep
Device Explorer
a20S Android 12.0 ("S")
Files
Processes
Sleep-tracking-main
app
src
main
res
drawable-nodpi
sleeptracking.jpg
Type here to search
32°C Rain showers
ENG
15:53
14-11-2024


ProjectOne
Version control
a20S
app
Running Devices
a20S
3:44
Stop
Elapsed Time: 00:00:-1
Track Sleep
1:1
Device Explorer
a20S Android 12.0 ("S")
Files
Processes
Sleep-tracking-main
app
src
main
res
drawable-nodpi
sleeptracking.jpg
Type here to search
32°C Rain showers
ENG
15:44
14-11-2024


ProjectOne
Version control
a20S
app
Running Devices
a20S
3:45
Sleep Tracking
Start time: 1970-01-01 05:30:00
End time: 2024-11-14 15:44:21
Start time: 2024-11-14 15:44:26
End time: 2024-11-14 15:44:28
Start time: 2024-11-14 15:44:31
End time: 2024-11-14 15:44:33
1:1
Device Explorer
a20S Android 12.0 ("S")
Files
Processes
Sleep-tracking-main
app
src
main
res
drawable-nodpi
sleeptracking.jpg
Type here to search
32°C Rain showers
ENG
15:45
14-11-2024

DEMO VIDEO :