# **Tower Stacker**

**Tower Stacker – Touch to Create & Collapse** is a hyper-casual Android game developed in Unity. Players build an endless tower by stacking procedurally generated tiles with randomized colors and sizes. The goal is to stack as high as possible without letting the tower tilt and collapse.

## **Features**

* Procedural generation of tiles with random sizes and colors
* Smooth camera movement and dynamic zoom based on tower height
* Touch-based input optimized for mobile devices
* Real-time score tracking with final score display on game over
* Slow-motion effect during the collapse sequence
* Easy restart and replay functionality

## **How to Play**

* Tap the screen to place and scale a tile on the tower.
* Place tiles carefully to keep the tower balanced.
* If the tower tilts beyond a critical angle, the game ends.
* Build the tower as high as possible to achieve a higher score.

## **Build Information**

* Platform: Android (.apk)
* Engine: Unity 2021.3 LTS or newer
* Target API Level: Android API Level 30 or higher (recommended)
* Input System: Touchscreen controls

## **Installation Instructions**

1. Build the project as an Android APK through Unity (File > Build Settings > Android > Build).
2. Transfer the generated .apk file to an Android device.
3. Install the APK by opening it on the device (ensure "Install from unknown sources" is enabled if necessary).
4. Launch the game and start playing.

## **Project Structure**

* Spawner.cs – Controls gameplay logic, tile generation, camera movement, score updates, and game state management.
* Tile.cs – Manages the behavior of individual tiles, including scaling and movement.
* UI Elements – Includes Tap to play instruction, restart button, score display, and game over panel.
* Prefabs – Tile prefabs for procedural instantiation during gameplay.

## **Requirements**

* Unity 2021.3 LTS or later
* TextMeshPro package
* Android device (minimum Android 8.0 recommended)
* USB cable or wireless transfer app to install APK

## **Notes**

* Time scaling is used during the game over phase for a smooth slow-motion effect.
* All tile colors are generated randomly at runtime to enhance visual variety.

## **Future Enhancements**

* Add background music and sound effects
* Implement save/load functionality for high scores
* Introduce different tower themes or tile shapes
* Add Google Play Services integration for achievements and leaderboards