We are happy to hear that you are up for the coding challenge! This is a great way for you to showcase the level of quality in gameplay and animations that we can expect from you. At the same time it helps us to learn more about your current skill level and it will help us to see how we can proceed.

The main **goal** of this challenge is to get answers to these 3 questions:

- ❏ **Can you build the specified core mechanics in a given time frame**
- ❏ **Do you have a sense and gut feeling for style, UX and animations**
- ❏ **Do you understand hyper casual game mechanics and balancing**

Our suggestion is to replicate the core mechanics of one of our games: **Bubble Pops!**
https://itunes.apple.com/us/app/bubble-pops/id1397315970
See the video link, if the game is not available in your country https://youtu.be/SglS9LQOsRA

- ❖ We recommend to focus on the core mechanics and the look and feel. You can ignore the menus and the 4 booster buttons at the bottom and focus only on the core gameplay. The goal is to create a visually pleasing experience with smooth input, nice animations and satisfying particle effects.

- ❖ Besides the common bubble shooter mechanic we added those rules:
  - bubbles with the same score merge and bump up the exponent by 1, e.g. 2x2 => 4, 3x2 => 8, 4x2 => 16, etc
  - bubbles prefer to merge into a location where an automatic new merge is possible
  - when the score reaches 2048 the bubble and its neighbours explode
  - when a bubble or a cluster of bubbles is not connected to the ceiling, the whole cluster falls down
  - if you clear the whole board, you get a "Perfect" notification

- ❖ There are no guidelines or restrictions except that you should use Unity and C#. You can use your own tools, libraries and frameworks. Ideally you do it with Entitas ECS https://github.com/sschmid/Entitas-CSharp, but only if it doesn't slow you down. Pick the tools where you feel most comfortable with and where you have the best output.

- ❖ Ideally the game should be in a releasable state. By that we mean that you should be happy with the game mechanics, animations, effects and the general look and feel while at the same time making sure that the game fits well into the exiting Popcore portfolio.

- ❖ The game should be optimized for 1080x1920. UX is more important than code. The code should be nice and tidy but the most important part is if the game is fun and feels nice. The code architecture should mirror the simplicity of the game. Less is more.

Your goal should be to showcase the level of quality in gameplay and animations that we can expect from you. Once you're happy, proud and ready to share the result with us, please upload the Unity project to a private GitHub repository and share it with me and I will review the code: https://github.com/sschmid

Please note that we will not use any of your code or assets in any way, the only purpose of this challenge is to test your ability in creating games.

- Please let us know what your **GitHub username** is, so we know which is your invitation.

- Please also provide an apk so we can play the game on the device. Given the scope of the game, it should be doable in 2 or 3 days. Let us know when it's a good time for you to start the challenge.

We're flexible so please feel free to split your available time so it works well for you.
We hope you will enjoy the challenge and have a lot of fun! If you have any questions you can ask anytime!