Hey there team, thanks for the opportunity.

Due to a trip tomorrow, I had a bit less than the full 48 hours, but I dedicated the available time fully and delivered what I believe is a solid prototype. I've chosen 3D and created a Vampire Survivors-inspired arena survival game and I used pre-made assets from the Asset Store for characters, environments, and VFX.

Core gameplay features an open arena where enemies spawn in waves and constantly pursue the player using Unity's CharacterController for smooth movement.

Enemies deal contact damage per second when close.

The player automatically performs periodic area-of-effect attacks by enabling/disabling a damage collider with timing-based cooldowns.

I implemented full character movement, basic animations (idle/walk/attack), and a proximity-based item pickup system for drops.

The inventory is a slot-based UI with two arrays: one for quick-access hotbar items (usable via number keys, e.g., '1' for health potions that restore HP) and one for the backpack. Items support drag-and-drop between any slots, and destruction when dragged outside the UI. The UI includes hover tooltips with item details.

The save/load system uses Unity's built-in serialization to persist inventory state across sessions. Save state happens when the application quits. And it loads back the data when the game boots. The UI scales across common 16:9 resolutions.

I intentionally built the inventory, movement, and combat systems from scratch without third-party frameworks to fully embrace the challenge.

Unfortunately, I didn't have time to add sound effects, background music, floating damage for player and enemies, a main menu and a death screen, which I would love to.