EAIE

Esports as Accelerator for Social Inclusive Education

LESSON

THE UNITY GAME JAM

AUTHOR

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CODEARTS SOLUTIONS

THE UNITY GAME JAM

The Unity Game Jam is a time-constrained development challenge in which students apply existing Unity knowledge to create a small game around a shared theme. The exercise investigates how effectively learners can combine mechanics, controls, interface elements, creativity and resource management under a realistic deadline.

Subject and level

Intermediate VET game-development learners who already know the basic Unity workflow and can create simple scenes, scripts and interactions without introductory setup support.

Connection to curriculum

The game jam integrates programming, game design, asset management, testing and project delivery. It supports higher-order outcomes in Bloom's taxonomy by requiring students to apply prior knowledge, create an original product, analyse problems and evaluate the result through peer testing.

Didactic and pedagogic considerations

A fixed theme and limited development window create productive constraints. Students organise their own work, make scope decisions and learn to prioritise a functional core over excessive features. Peer testing and reflection turn the final build into evidence for both technical and collaborative learning.

Time estimate

5-6 hours

THE UNITY GAME JAM

Group size

12-24 students

Overall introduction to exercise

Students receive a theme and must produce a functional Unity game before the deadline. They may work individually or in small teams, but every project must demonstrate a clear mechanic, basic controls and a playable beginning-to-end loop.

The activity simulates a compressed professional production cycle. Learners must decide what can realistically be achieved, manage available assets, solve problems independently and reserve enough time for testing. The game jam therefore makes creativity, technical competence and time management equally visible.

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Exercise as presented to the students

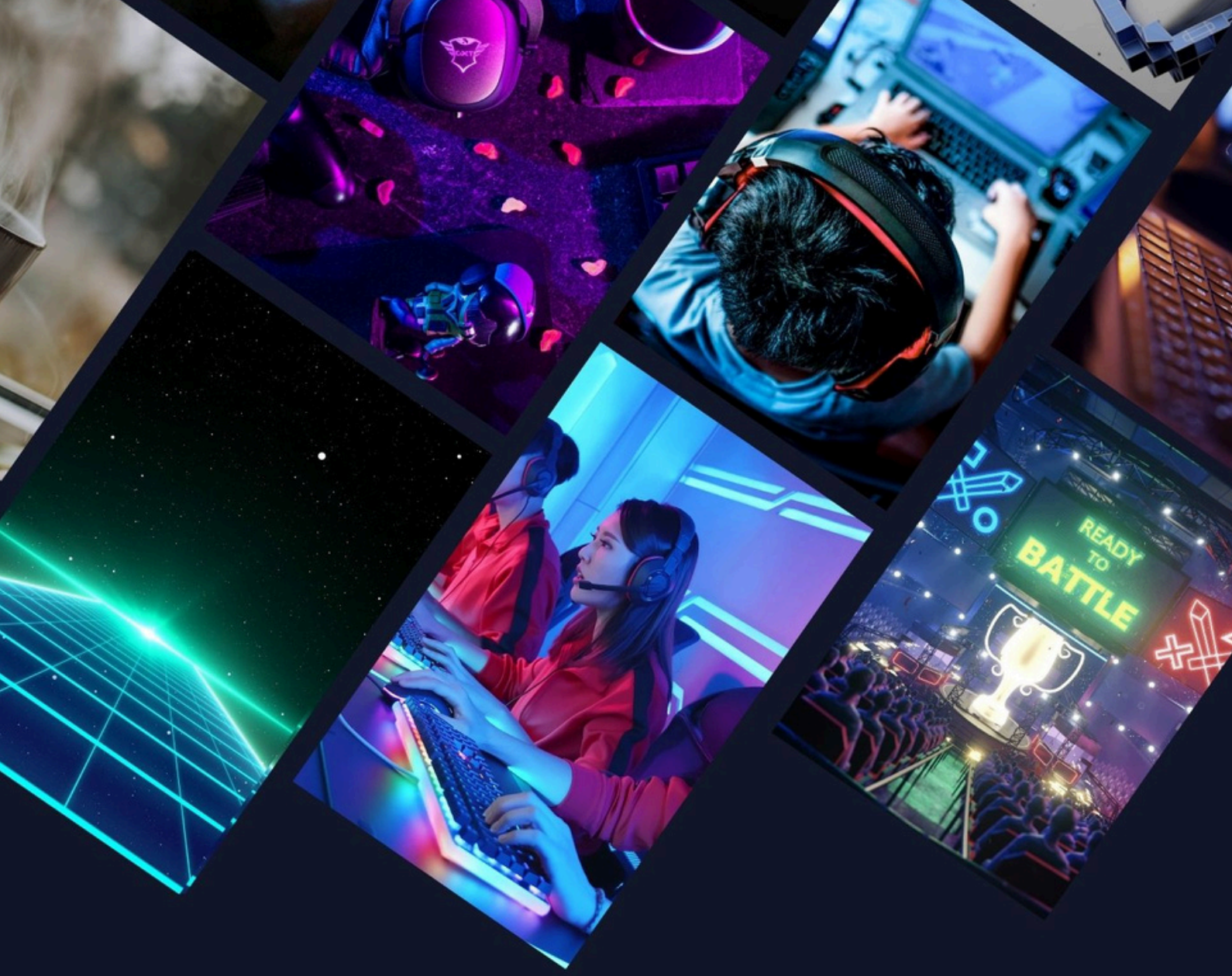
The game jam begins with the announcement of a single theme and a small set of constraints, for example one main mechanic, one playable level and a maximum development time. Students have fifteen minutes to interpret the theme, sketch an idea and decide whether to work individually or in a small team. The teacher checks scope but does not prescribe the concept.

Teams then create a short production plan containing the minimum playable version, optional features and role responsibilities. Because learners are already familiar with Unity, they move directly into scene construction, scripting and asset integration. The teacher acts as a facilitator, answering targeted questions while encouraging students to solve routine issues through documentation and debugging.

A midpoint checkpoint requires every project to be playable, even if incomplete. Students demonstrate the current build to the teacher and identify the single highest-risk issue that could prevent completion. This forces teams to prioritise mechanics and controls before visual polish and helps students experience why scope management is central to real development work.

During the final hour, teams freeze new features and focus on testing, interface clarity and stability. Projects are exchanged between groups for a short playtest in which peers record whether the game communicates its objective, whether controls are understandable and where technical problems appear. Developers are allowed one final revision based on the feedback.

The session concludes with a showcase in which each team presents its finished build, explains how the theme was interpreted and describes one compromise made because of the deadline. Assessment combines functionality, creativity, code or project organisation, teamwork and reflection. The exercise demonstrates that successful game development depends as much on decision-making and time control as on technical knowledge.



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