

Re-engineering Higher Education through Active Learning for Growth, HERA

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About HERA



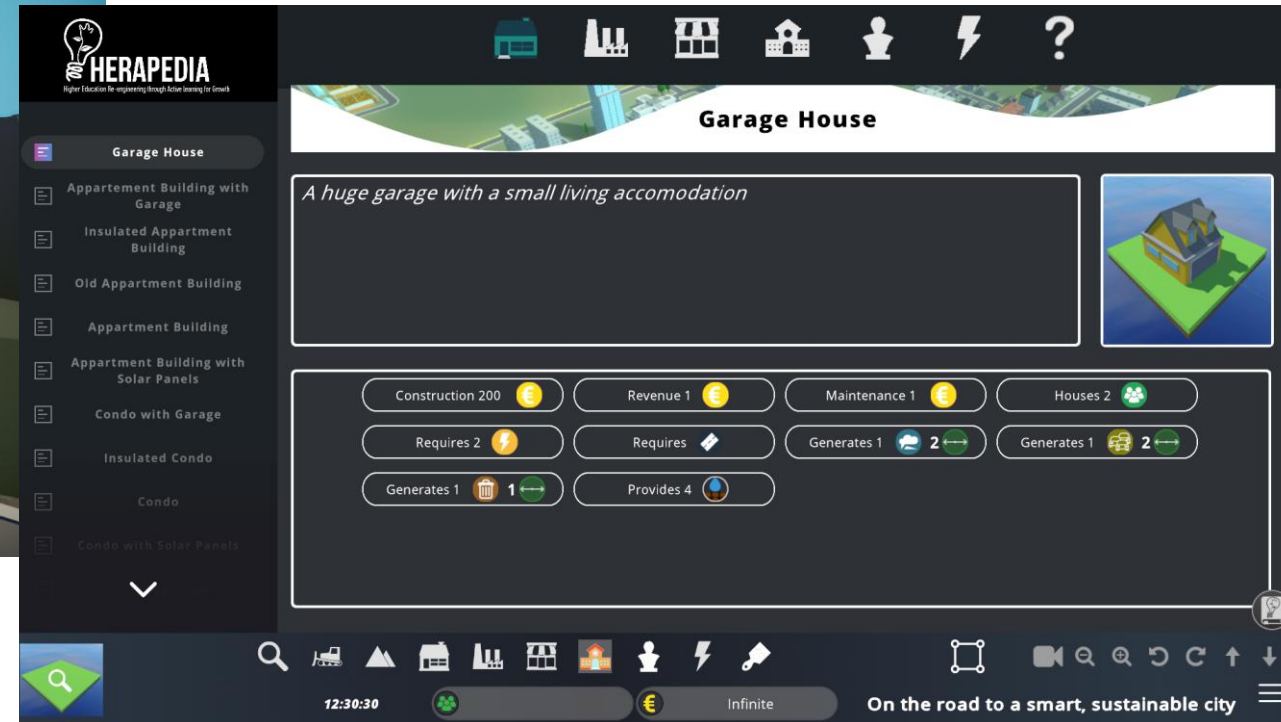
- HERA aims to develop high order problem solving skills among engineering and economics higher education students, building their capacity to address emerging 21st century societal and industry challenges. HERA introduces active learning design to expose students to complex challenges inspired by real life, the solution to which requires the integration of interdisciplinary knowledge, emulating industry problem solving processes. HERA deploys digital serious games to enrich classroom engagement and interaction, promoting experimentation, collaboration, independent learning, communication, and presentation skills desirable.
- The HERA project is funded by the Erasmus+ program and runs from 2019 to 2021 (project code 2019-1-EL01-KA203-062952).

The background

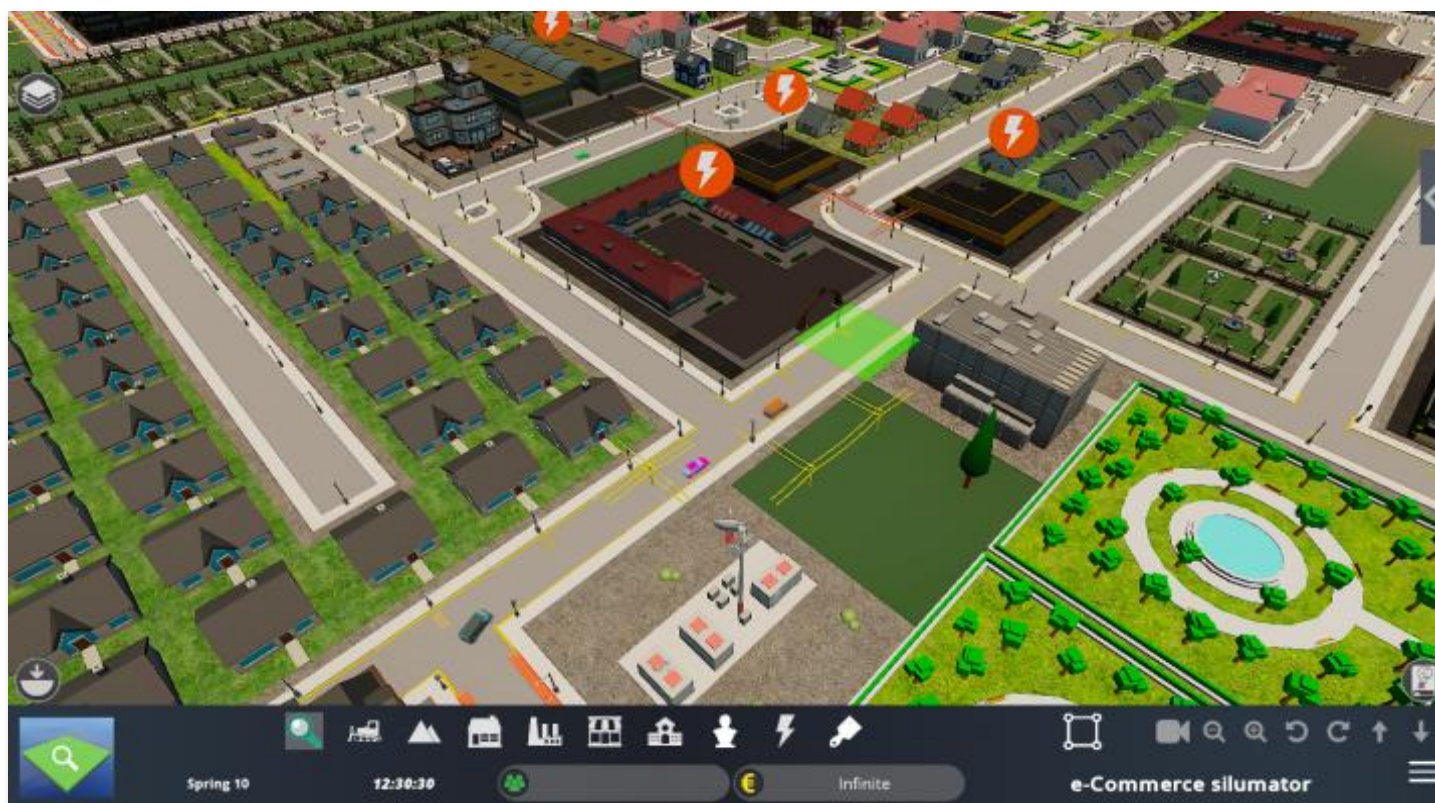


- Literature on gaming and learning
- Surveys with students on which “soft” skills they find are most relevant
- Made learning sheets for educators
- Videos to support
- Developed the game over the last 1.5 years
- Identified different scenarios relevant for the game

Educational software: a Sims inspired game (focus on the city)



- Parks and housing



- Museums and sports



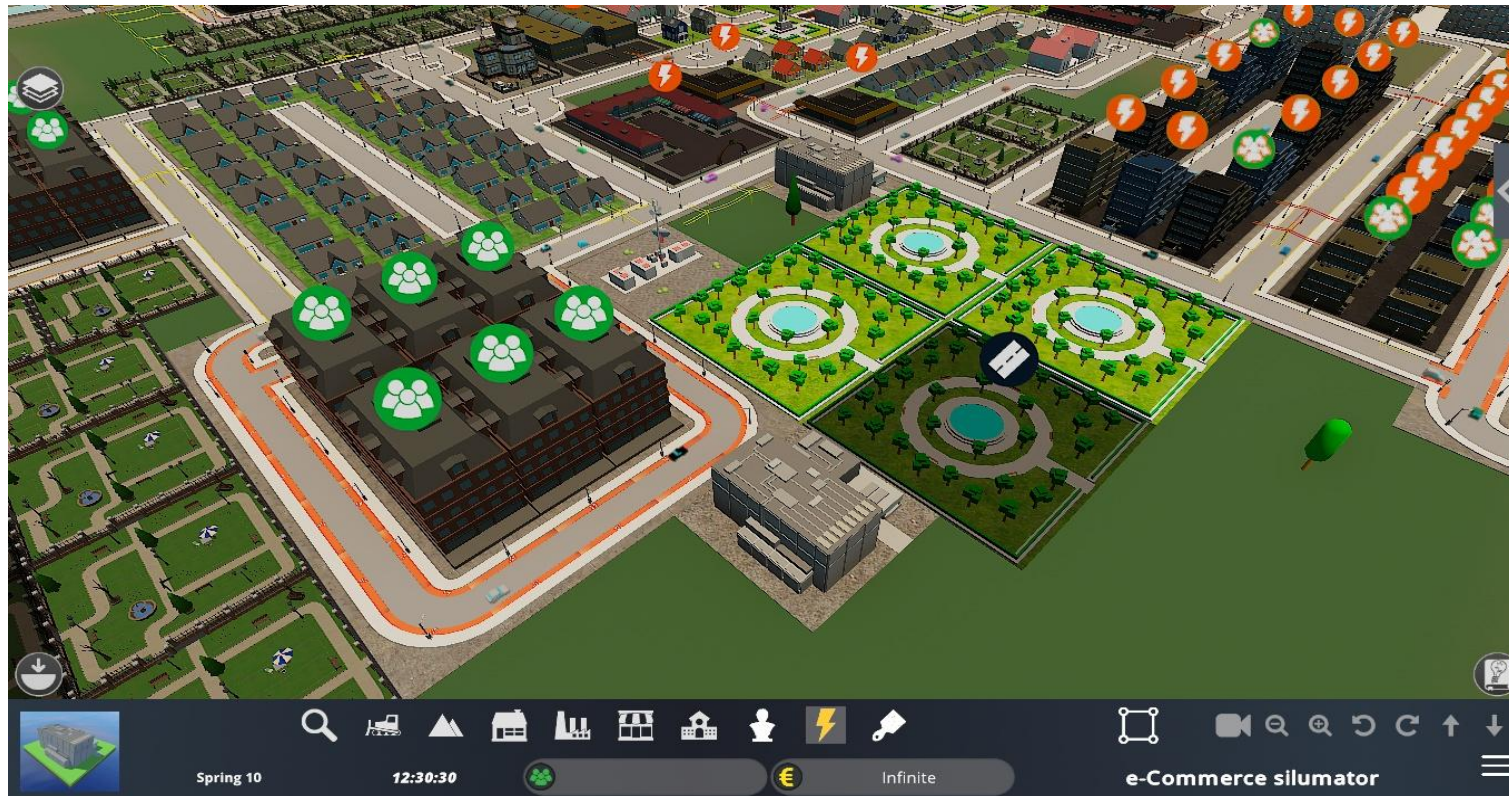
- Hospitals and health clinics



- Universities and schools



- Internet service providers



- Energy infrastructure



Rolls of players and the collaborative, learning part



Courses

On the road to a smart, sustainable city

Many cities experience a need for moving towards to becoming a more sustainable and technology smart city. A large city typically consists of a combination of newer, modern buildings an infrastructures and very old housings, buildings etc which are not very environmentally friendly. This course has the purpose to transform the large city to a smart, sustainable city.

test team

1 joined
Comments:
test

Leave

Smart city, sustainable city, internet, renewable energy, pollution

Lone
xKTrOiuPog
test

The screenshot shows a course page with a cityscape background. It includes a title, a paragraph of text, a list of tags, and a sidebar with a 'test team' section showing one member and a comment.

Courses

test team
test

Edit me
Double click me

The screenshot shows a chat window titled 'test team' with a 'test' member. There are buttons for 'Edit me' and 'Double click me'.

Courses

Instructions

Many large cities were build over many years and decades and consists of a total mix of modern house, old, polluting houses, industry etc. Change the traditional city into a smart and sustainable city. Discuss what it will mean to be a smart, sustainable city and transform the city accordingly. The idea of a smart, sustainable city is a real problem that many large cities have.

Roles (Chosen : City energy manager)

No Role

City energy manager

Private internet and technology contractor

Private contractor for commerce and housing


Choose this role to empty the role you occupy for other players. You cannot play the game as a No-Role player.

Choose this role


The screenshot shows an 'Instructions' page with a paragraph of text, a list of roles, and a 'Choose this role' button.


And choose the roll to play!






Courses





 Instructions

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Choose this role to empty the role you occupy for other players. You cannot play the game as a No-Role player.

Choose this role

Start the game



Scenarios control the learning perspective and the rolls to be played



- Examples of scenarios:
 - On the road to a smart, sustainable city
 - Smart parking city
 - Festive lights
 - Covid scenario
 - Flood management
 - Olympic games
 - Etc.



- Link to HERA web-site: <http://heraproject.eu>
- Link to the HERA game: <http://heraproject.eu/index.php/2021/01/29/new-version-of-hera-software-released-29-1-2021/>
- Try out scenarios
 - Smart parking zdOHyLqa1x
 - On the road to a smart, sustainable city xKTrQiuPcg
- Link to survey:
https://docs.google.com/forms/d/e/1FAIpQLSckfoTg8TipgWe6dU1g_tnGfQxQqzUcPt_bHLSwPmd3e26-Cw/viewform

Using a game for educational purposes – what do you think?

