

# Einführung in die Informatik für Games Engineering

## Tutorials

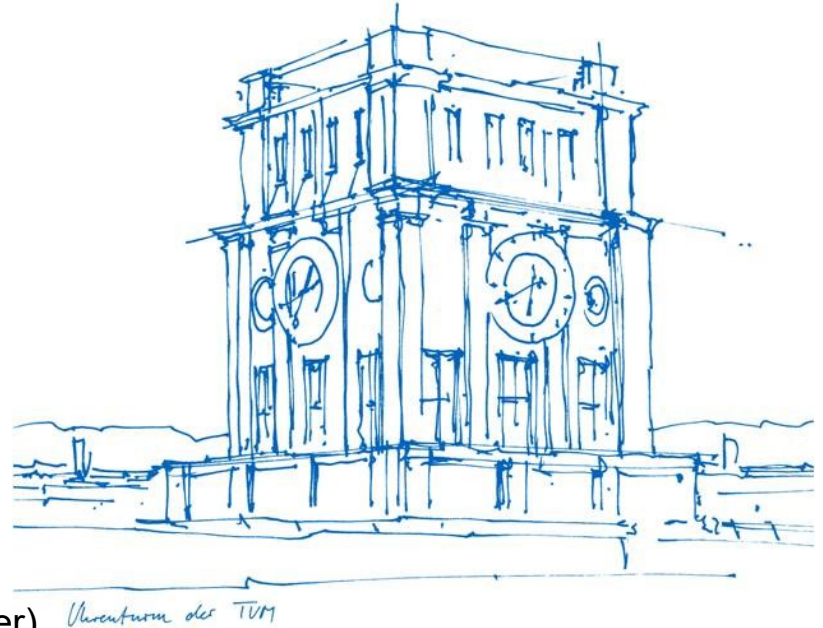
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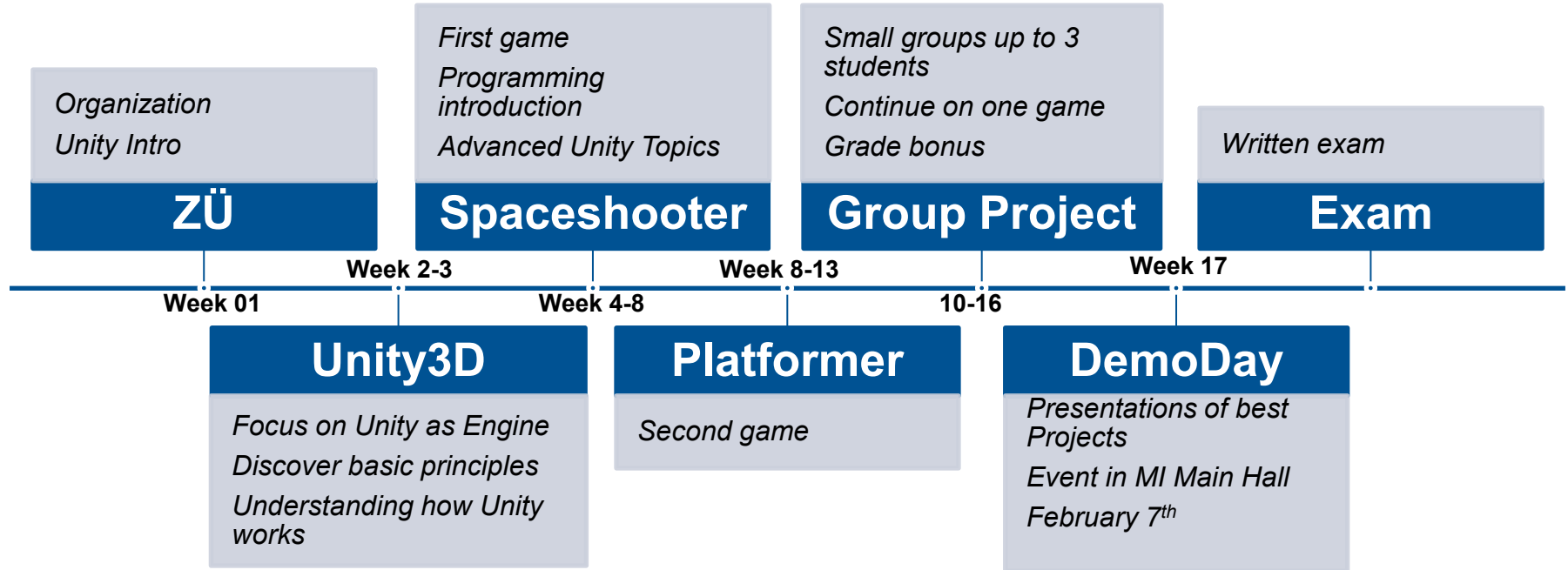
Technical University of Munich

School of Computation, Information and Technology

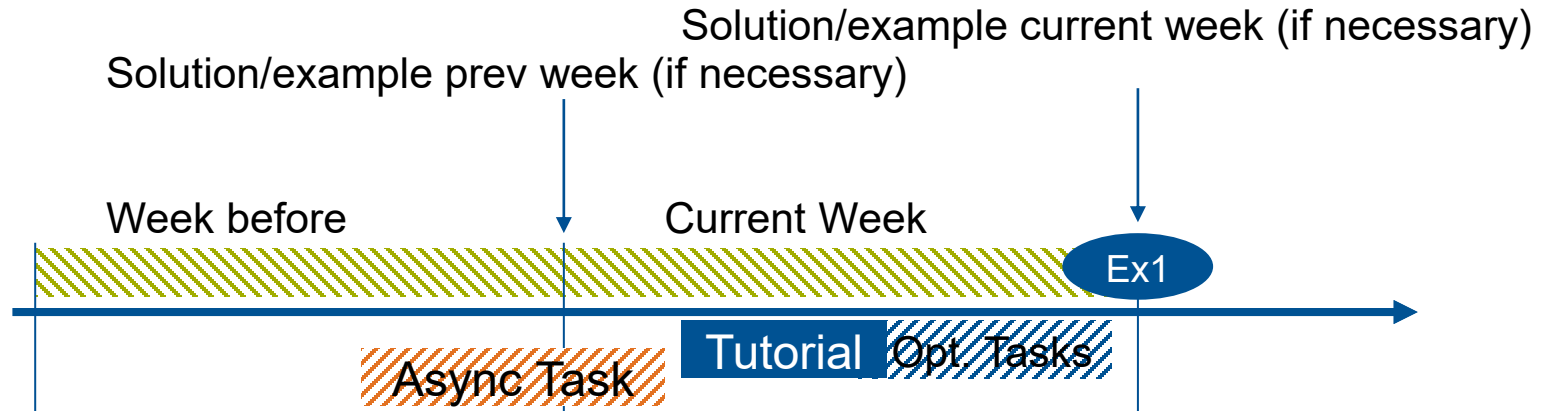
Associate Professorship of Augmented Reality (Prof. Klinker)



# Tutorials – Schedule (planned)



# Example Tutorial Week



# Welcome

Time to get to know you 😊

Your Tutor



# Start with Unity

- Open Unity Hub to create a new 3D Project
  - If you are using our PCs (computer rooms) please choose your path wisely
    - **ALWAYS** select the drive letter of the network drive! -> like X:\User Documents\Unity\MyProjects
    - Unity will fail to open same location using shortcut „Documents“\...

## #1 Select a Layout that fits to your screen size

- Try to place two scene views and the game view at once in your layout
- Save your design (and switch back to a default one if you like)

## #2 Create content

- Add a new Cube, a sphere and a plane to your empty scene
- Use different ways for each (using menu bar, Hierarchy)

# Start with Unity

## #2 cntd.

- Move your scene view (using scrolling/middle mouse, right mouse button, Nav icon (top right) or arrows...)
- Create a second cube
  - Where does it spawn?

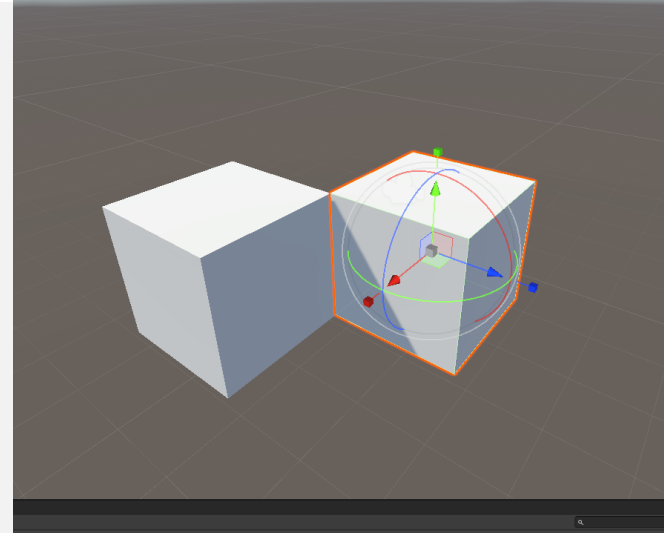
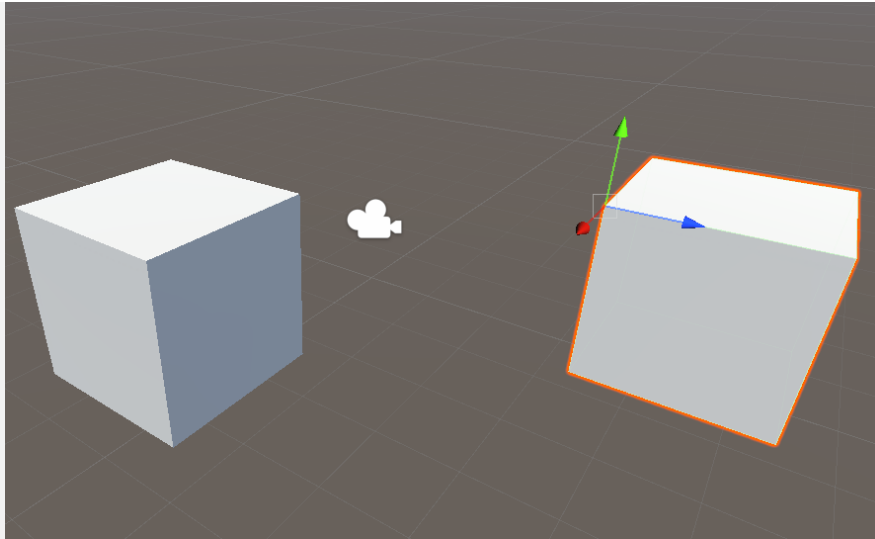
## #3 Transformation

- Try to rearrange your objects (using mouse, inspector, transfer tool „X“-Key)
- Move them as close as possible together
  - think about scale factor and positions of the objects
  - Select them using scene view or hierarchy
    - Don't see one object? Select it in the hierarchy and press „F“, what happens?

# Start with Unity

## #4 More shortcuts

- Press and hold down „V“, grab an edge from your cube and place it next to another cube



# Start with Unity

## #6 Save your scene

- Save your scene in the scenes folder of your project

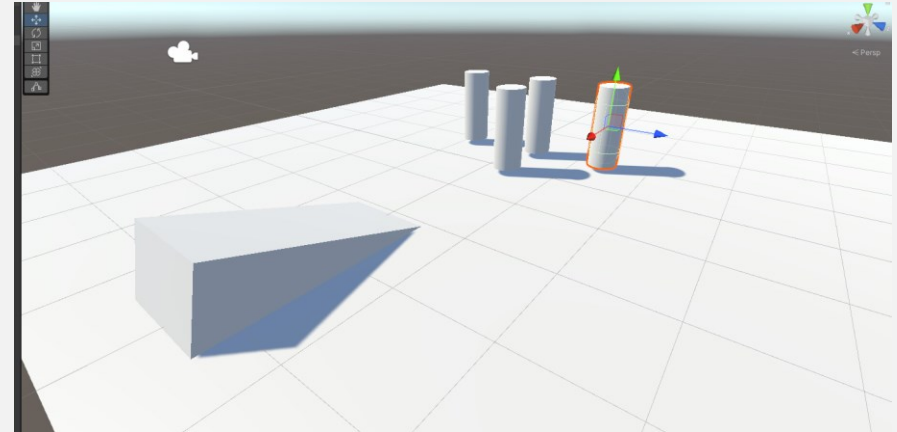


# Build a small bowling level

## #1 create a new 3D Scene

- Use the learned methods to setup a small bowling level
  - Use the arrows or planes between to restrict motion to a specific axis

What were missing to fulfill this task?



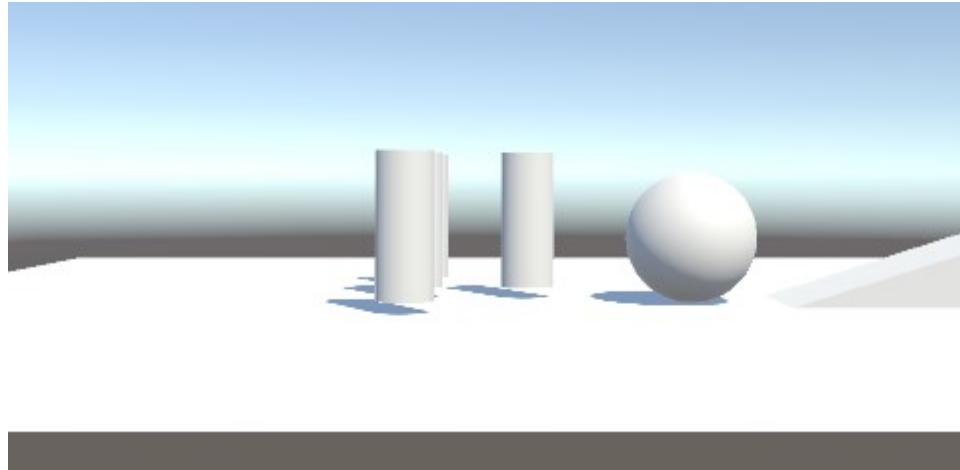
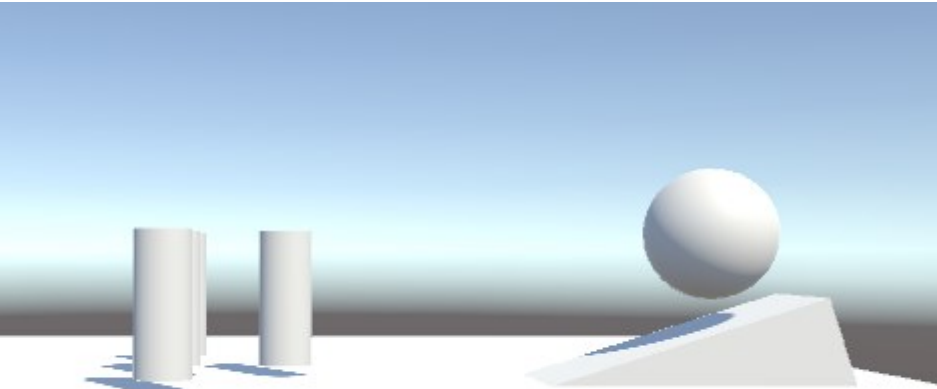
# Build a small bowling level

#2 Make the „ramp“ as child object of the plane or „floor“ object you choose

#3 Place a sphere over the ramp

#4 Add a „rigidbody“-component to the sphere using the inspector window

# Build a small bowling level



# Build a small bowling level

#5 Press play and enjoy!

# Build a small bowling level

#6 What happens, what might missing?

# Additional Task (free work time during tutorial or at home)

#1 Place different light sources to highlight your bowling scene (Spot lights are good)

#2 Use the Project Tab to create new Materials with different Color

- Apply them one your objects

#3 Use the Asset Store to find cool assets (Free) fits to your game

- Or have a look on moodle and import the package

Please present your final results next Tutor session!

