Unity:

Collaborative Virtual Reality Development in Teams

Creative Coding— CS+DES

Creative Coding
Spiring/Fall

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Collaborative Development in Unity

1. PlasticSCM/Gluon (Plastic replaced Unity Collaborate in 2022)
2. Github – TortoiseGit (Windows) / SmartGit (Mac)
3. Drive

- Virtual Collaboration requires work
- Learning curve for new frameworks
- Excellent project organization

managing scenes - the biggest challenge
Suggestion: divide scenes into prefabs to work independently in own scene,
but the corresponding prefabs are in the main scene.
Or each student works on a different scene that they navigate between.

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Collaborative Development in Unity

1. Plastic SCM/ Gluon (Unity Teams Basic)

File-sharing cloud service to share unity projects for collaborative development
Up to 3 members
Up to 1GB

Can be clunky and slow
pain to do mergers (merge conflicts)

Videos Box> Videos> Collaboration

- DownloadProjectFromPlastic
- AddingProjectToPlastic
- AddingProjectToPlasticUnity2022

Documentation Guide https://docs.plasticscm.com/gluon/plastic-scm-version-control-gluon-guide

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Collaborative Development in Unity

2. Github – TortoiseGit (Windows) / SmartGit (Mac)
more easily merge text/code conflicts
binary file format (models, textures, Unity scenes) can't be merged
useful for managing different version and going back to an older one if needed
nice interface
Learning curve: learn new terminology like Sync, Pull, Push, Commit.
require some configuration to be most efficient - such as ignoring certain folders like Library
in the commits.

SmartGit (Mac) download:
https://alternativeto.net/software/tortoisegit/?platform=mac

Github course (52 minutes):
https://www.udemy.com/course/git-started-with-github/?LSNPUBID=JVFxdTr9V80&ranEAID=JVFxdTr9V80&ranMID=39197&ranSiteID=JVFxdTr9V80-KSgiwen2aqT1UBFBUYKfEA

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Collaborative Development in Unity

3. Drive

Familiar
Easy
Intuitive
Requires downloads/uploads
Requires task scheduling

the Library folder is best when generated on a local machine and not copied to others because of differences between the systems and the Library folder usually has 100s of small files that slows down copying and increases the download size.

Steps:
- zip up Unity project folder except Library folder
- upload
- share

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