Unity: Collaborative Virtual Reality Development in Teams



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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.



1. Plastic SCM/ Gluon (Unity Teams Basic)

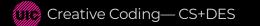
File-sharing cloud service to share unity projects for collaborative development Up to 3 members Up to 1GB

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

Videos Box> Videos> Collaboration

- DownloadProjectFromPlastic
- AddingProjectToPlastic
- AddingProjectToPlasticUnity2022

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



- 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): <u>https://www.udemy.com/course/git-started-with-</u> <u>github/?LSNPUBID=JVFxdTr9V80&ranEAID=JVFxdTr9V80&ranMID=39197&ranSiteID=JVFxdTr</u> <u>9V80-KSgiwen2aqTIUBFBUYKfEA</u>



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