

AAE2004 Introduction to Aviation Systems

AAE

Design of Path Planning Algorithm for Aircraft Operation

Week 3: Introduction to GitHub Collaboration

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Assisted by

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Mutual editing on a document with collaborators remotely?

acceptance	26/3/2021 11:58 AM	File folder	
final submission	2/8/2021 11:38 AM	File folder	
ieee_taes_novatel_heatmap	29/7/2020 2:44 PM	File folder	
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My EndNote Library.enl.unzipped	14/7/2020 9:26 AM	File folder	
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cover letter.docx	28/7/2020 12:26 PM	Microsoft Word D...	17 KB
figure.pptx	22/6/2020 11:11 AM	Microsoft PowerP...	7,122 KB
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My EndNote Library.enl	8/1/2021 10:42 AM	EndNote Library	141 KB
References.docx	14/7/2020 9:16 AM	Microsoft Word D...	18 KB

Download files from various channels, such as mail, whatsapp, etc?

Can we edit the documents online ? Google, Microsoft has the solutions!

Can we edit the “code” online?

Github

Archive your coding online (in the cloud)

Video: **VSC-Git Basic Operations**

Pull: *To update local branch with remote,
update all remote tracking branches*

Pull

Clone : *To download a
repository to your local
machine*

Check out to: *Switch to
a specific branch*

Open file and
Check out to

Code and
Debugger

Clone/
Fetch

Fetch : *To pull a branch to
your local machine*

Commit

Add
(Stage)

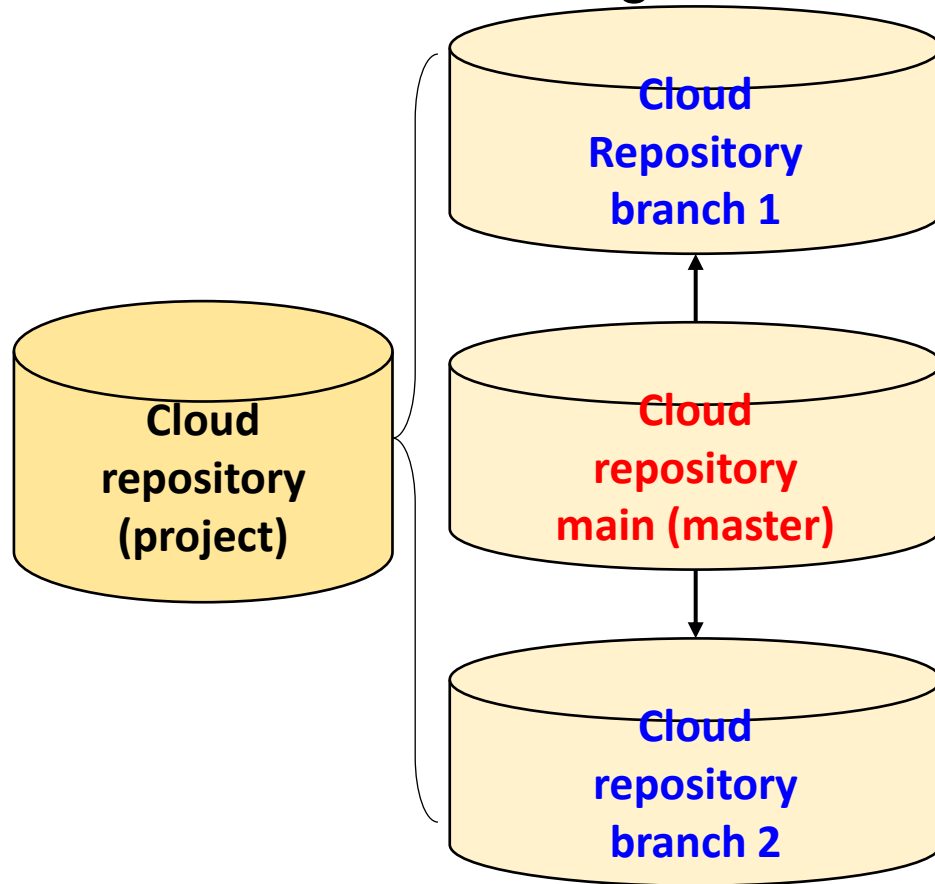
Push

Commit: *To create a
snapshot of the repository*

Add (Stage): *To add files or
segments in the next commit*

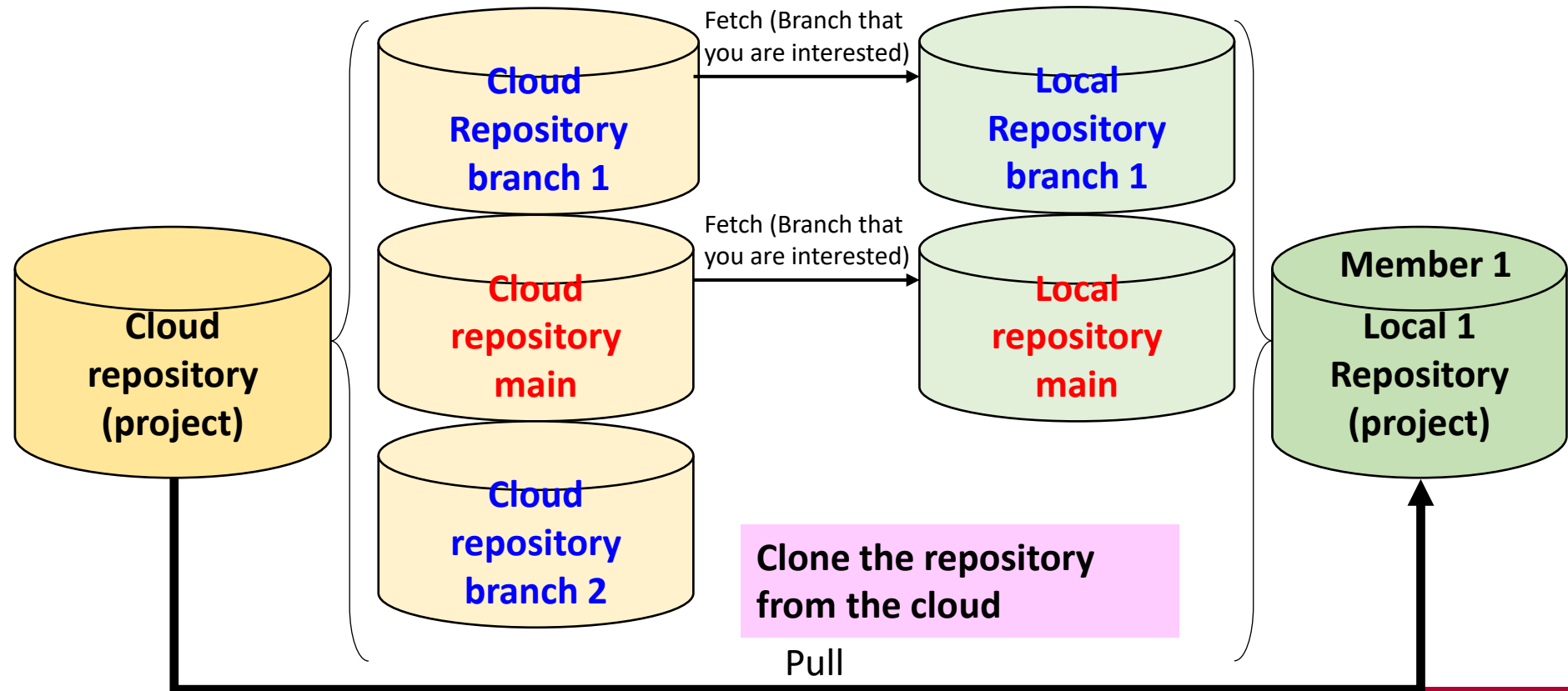
Push: *To upload the commit
made on a local branch to GitHub*

Collaborative coding online – Generate Branch (Member)

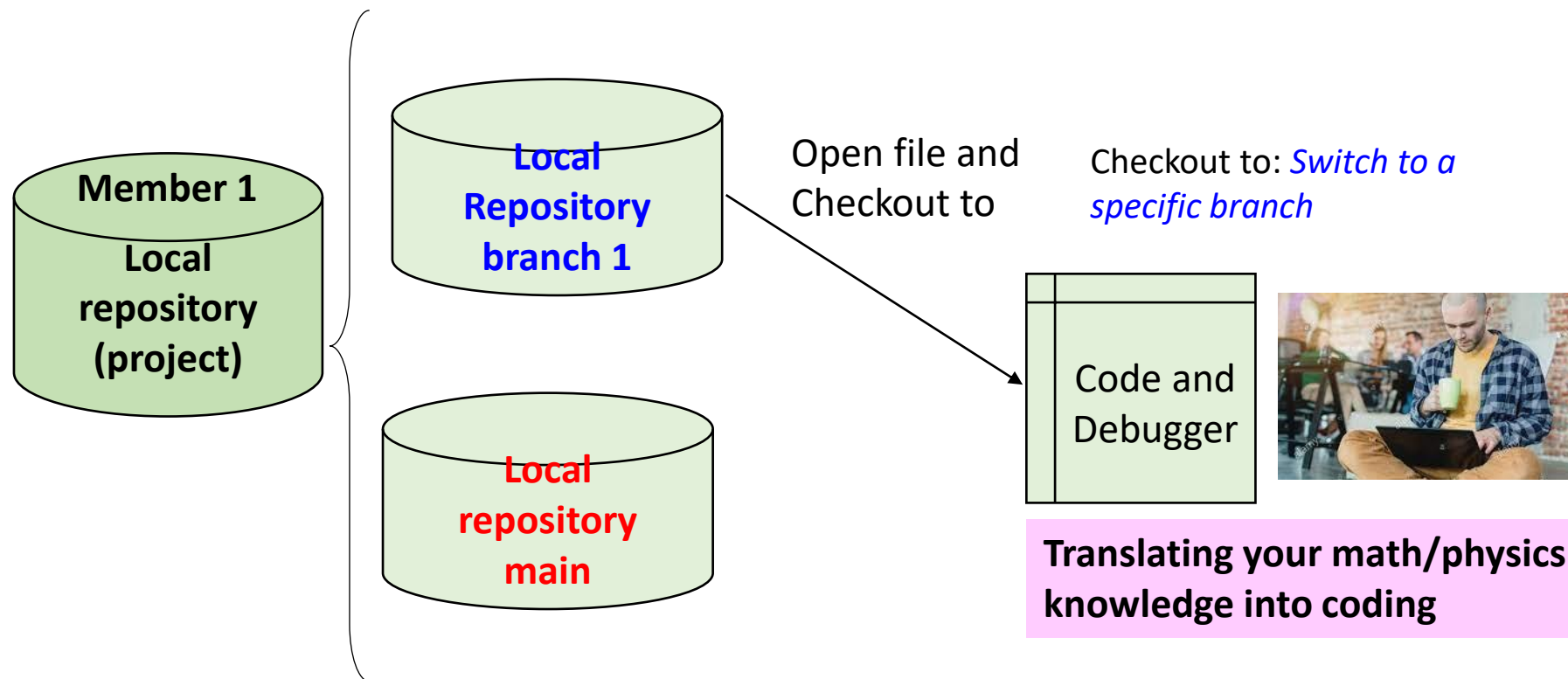


To generate a branch for different member that participant the project, creating a contained area of your repository to develop features, fix bugs and more.

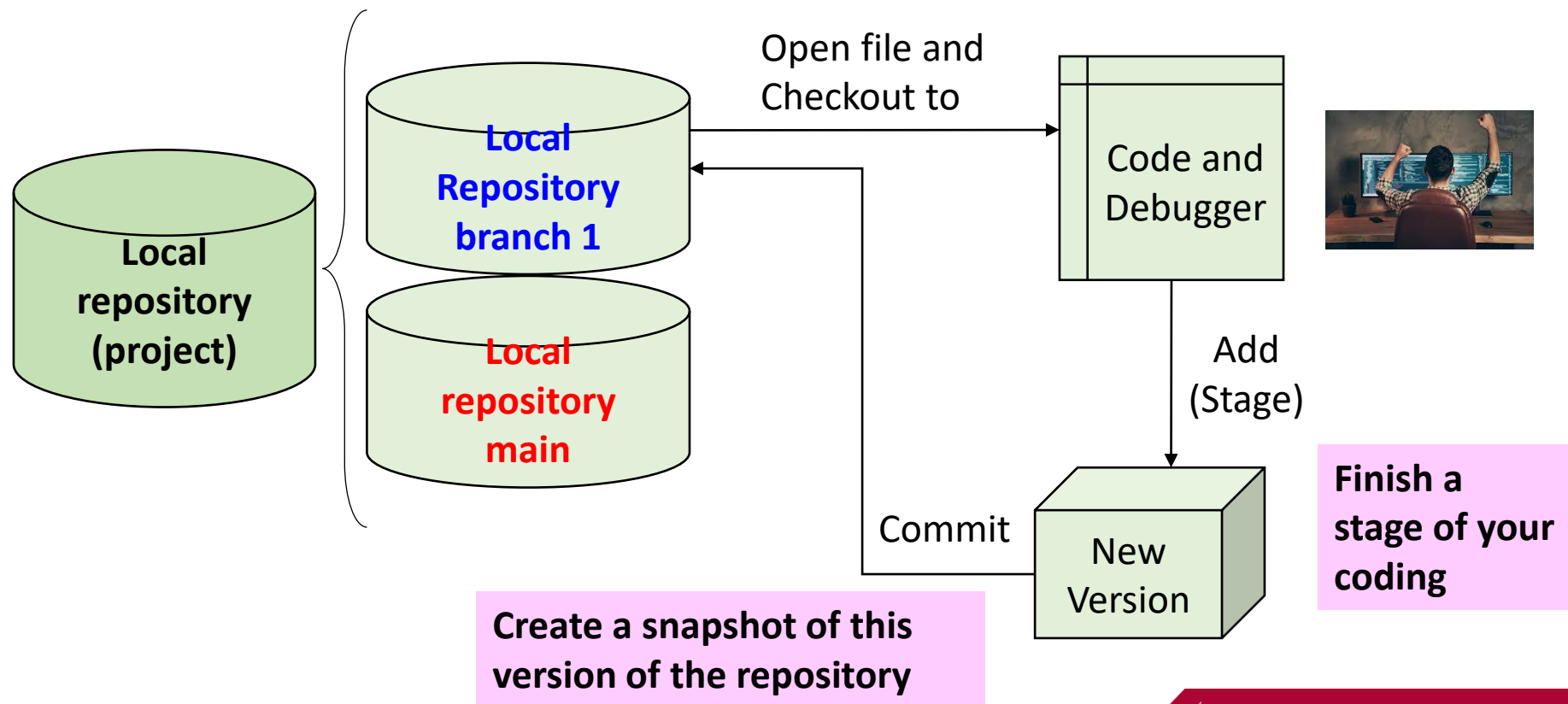
Collaborative coding online – Fetch/Pull Branch from Cloud



Collaborative coding online – Edit the code in the local computer



Collaborative coding online – Edit the code in the local computer



Concept of collaborative coding online

Video: **VSC-Git**
Branches

Web based

Ready to update to the cloud branch!

Open file and
Check out to

Let the group
leader knows
my work

Merge by Pull Request

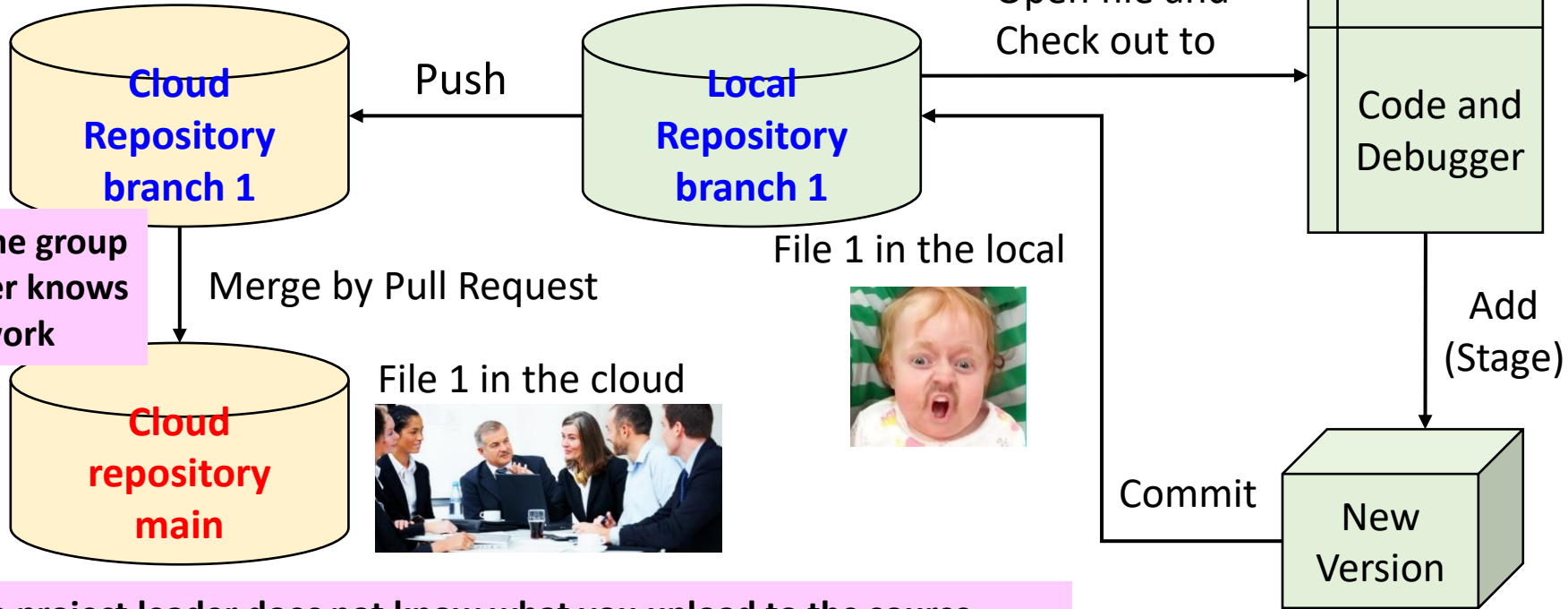
File 1 in the local

File 1 in the cloud

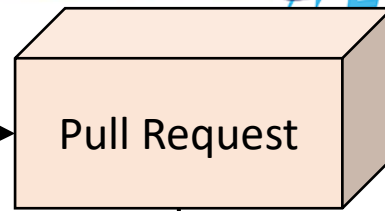
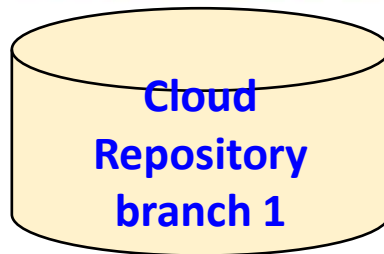
Add
(Stage)

Commit

If the project leader does not know what you upload to the source code, you will create a lot of confusions!



Web based



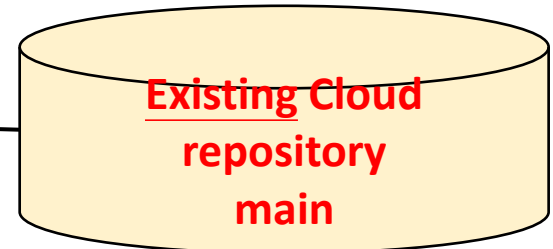
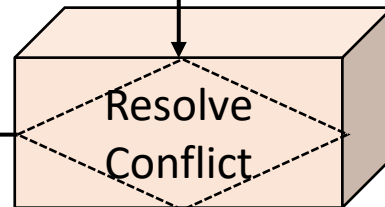
Pull request: *To apply for code review and potential version merge/combination*

Group Leader can oversee the progress and control the master code!

Making decision to reject the pull request ask the member to revise.

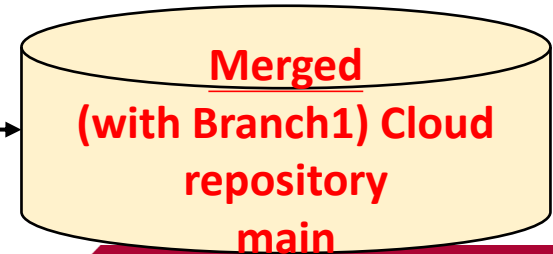
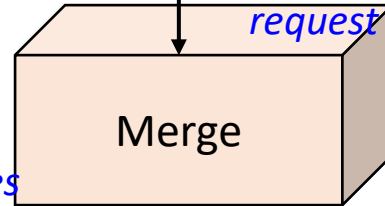
N

Resolve Conflict: *To review the conflict between the new version code in a branch with the existing code in main branch.*



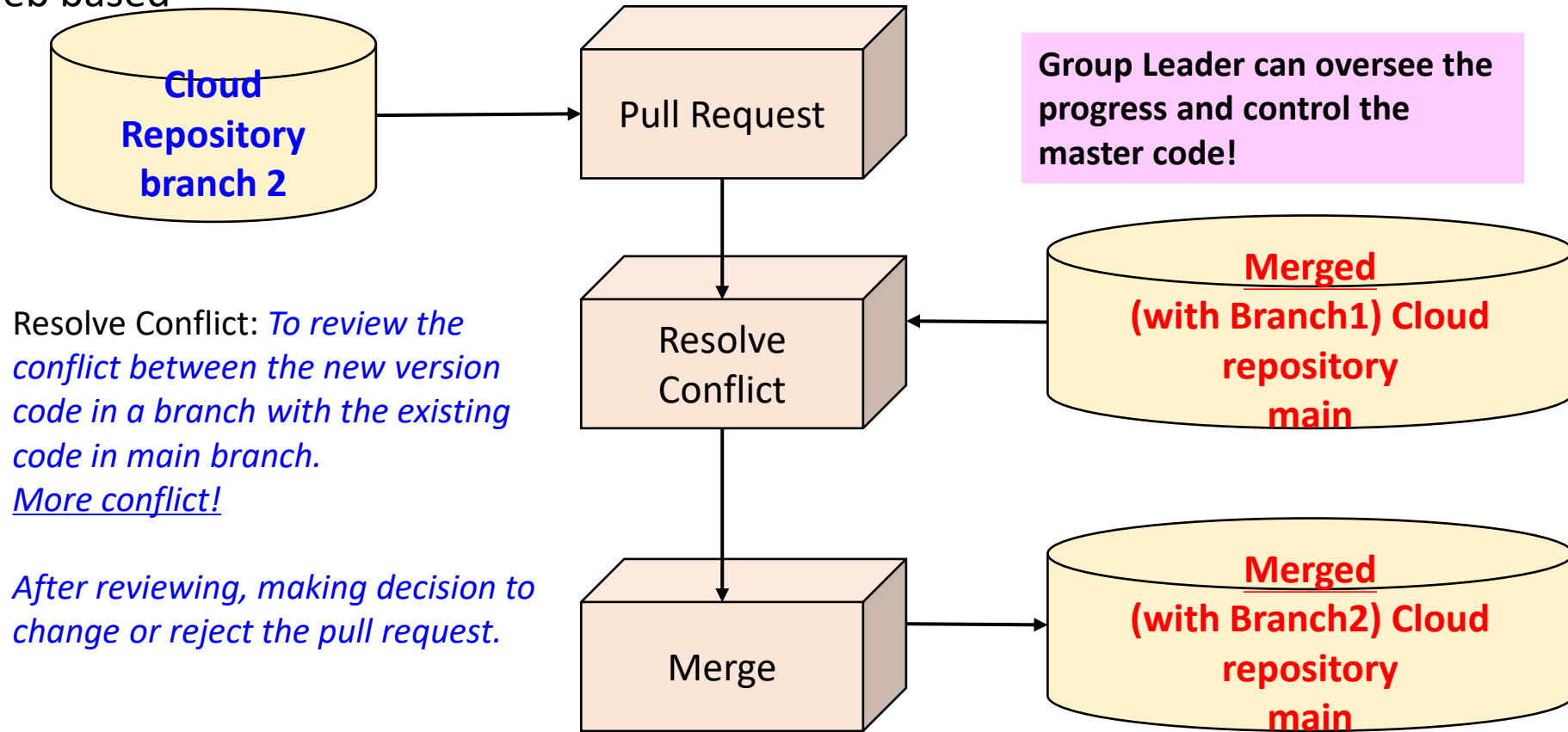
Making decision to accept the pull request

Y



Merge: *To merge one branch to the master branch, replacing the old code with the ones with new features and updates*

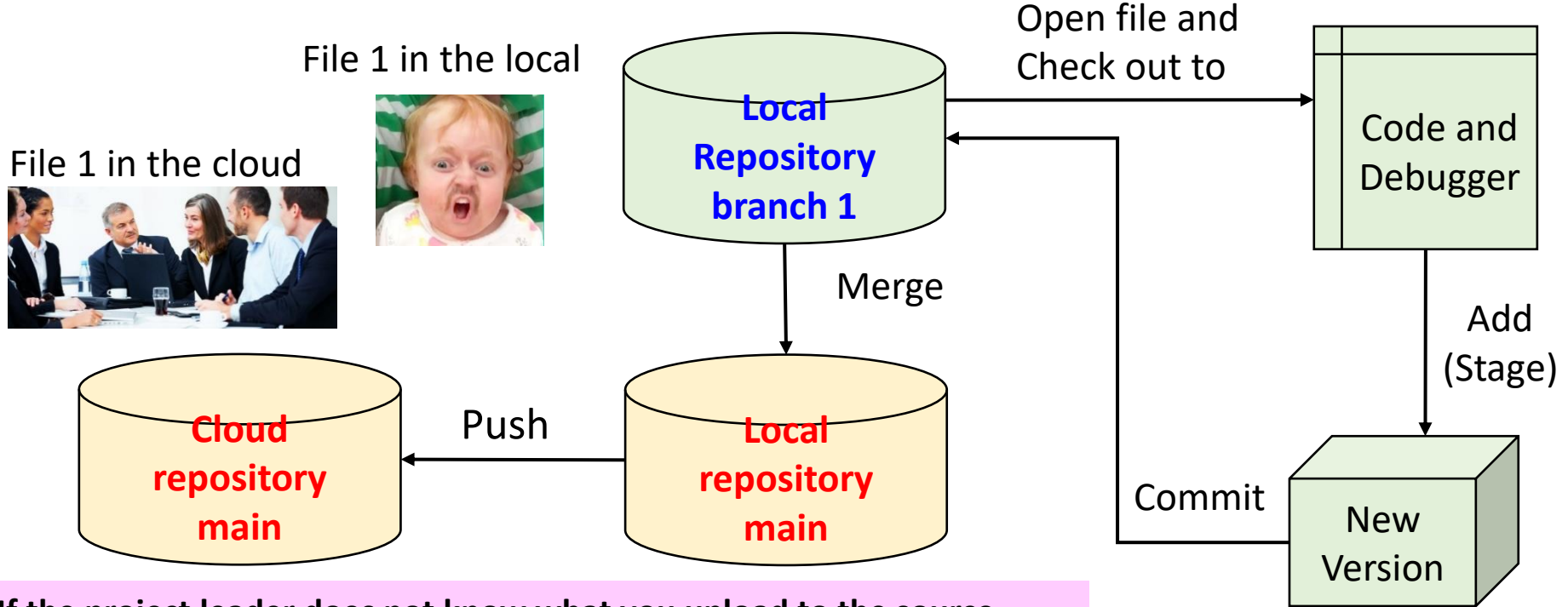
Web based



Concept of collaborative coding online

VS code based

Video: **VSC** **Git**
Conflicts



If the project leader does not know what you upload to the source code, you will create a lot of confusions!

VS code based

Video: **VSC Git**
Conflicts

