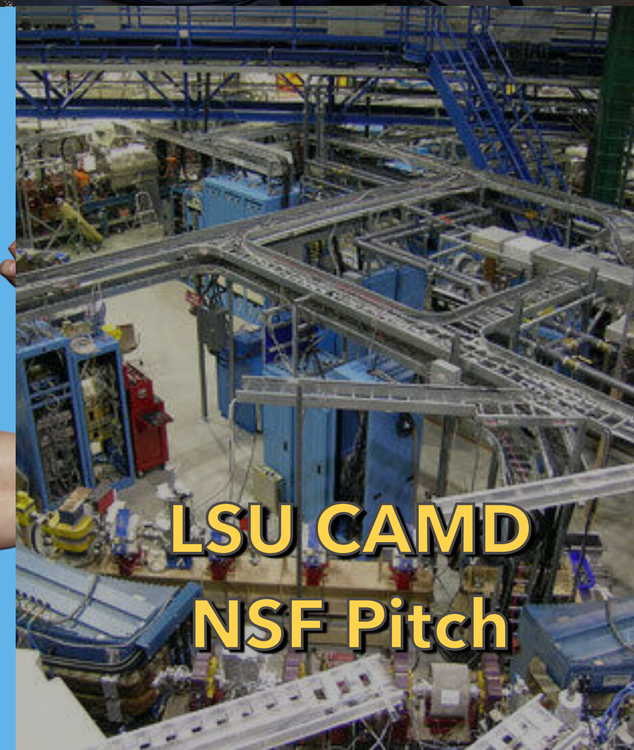
DMAE - AUGUST 29TH, 2025

Fall 2025 - Research

A full plate and then some...

create.

Digital Twin
Mississippi River



Initial Assignments

Syngenta

- Hannah
- Tina
- Darrius
- Rob

XR

- Matin
- Webb

PFT DT & Class

- Cody
- Alyssa
- Moon
- Isabella (v)
- Mimi
- Claude
- Aidan

Mount Vernon

- Ian
- Mona
- Kristina
- Rainn
- Mahi

CAMD

- Katy

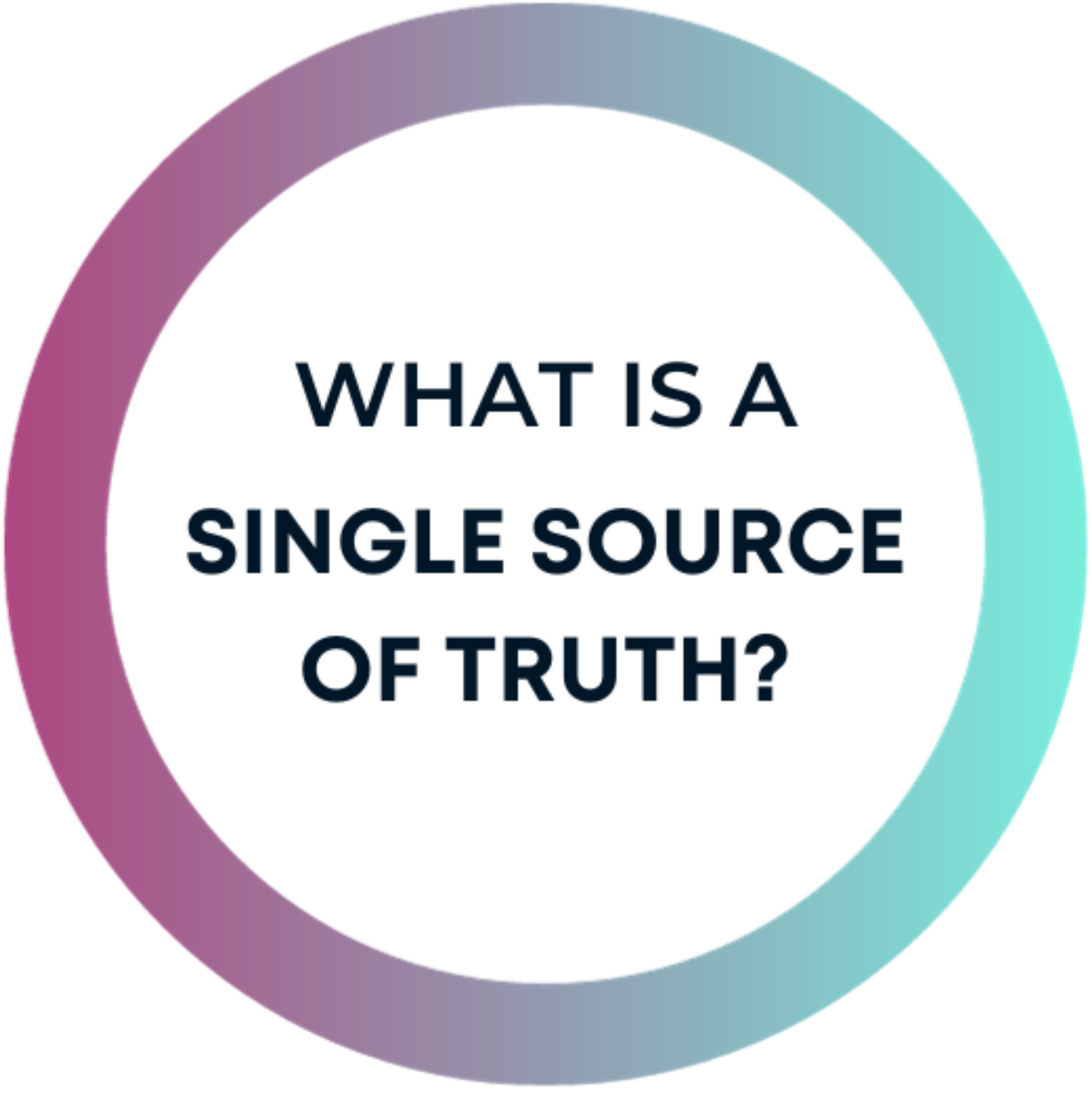
Kinesiology

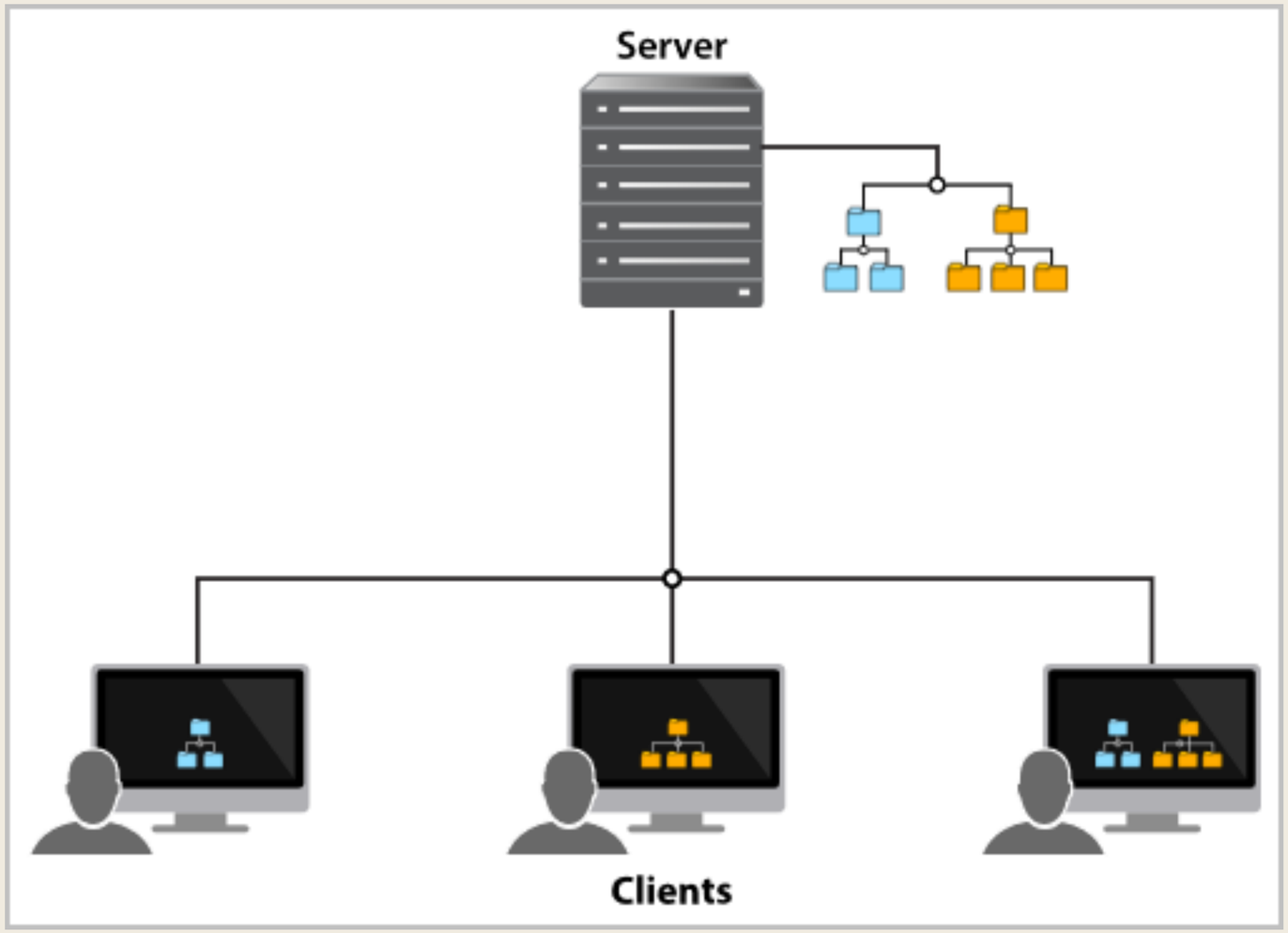
- Amir
- Matin

Version Control

Perforce

- Group project one source of truth
- Backs up ALL of our data
- Go back in time (unlimited undos)
- Install P4V and P4One
- Integrate it into your workflow!


WHAT IS A
SINGLE SOURCE
OF TRUTH?

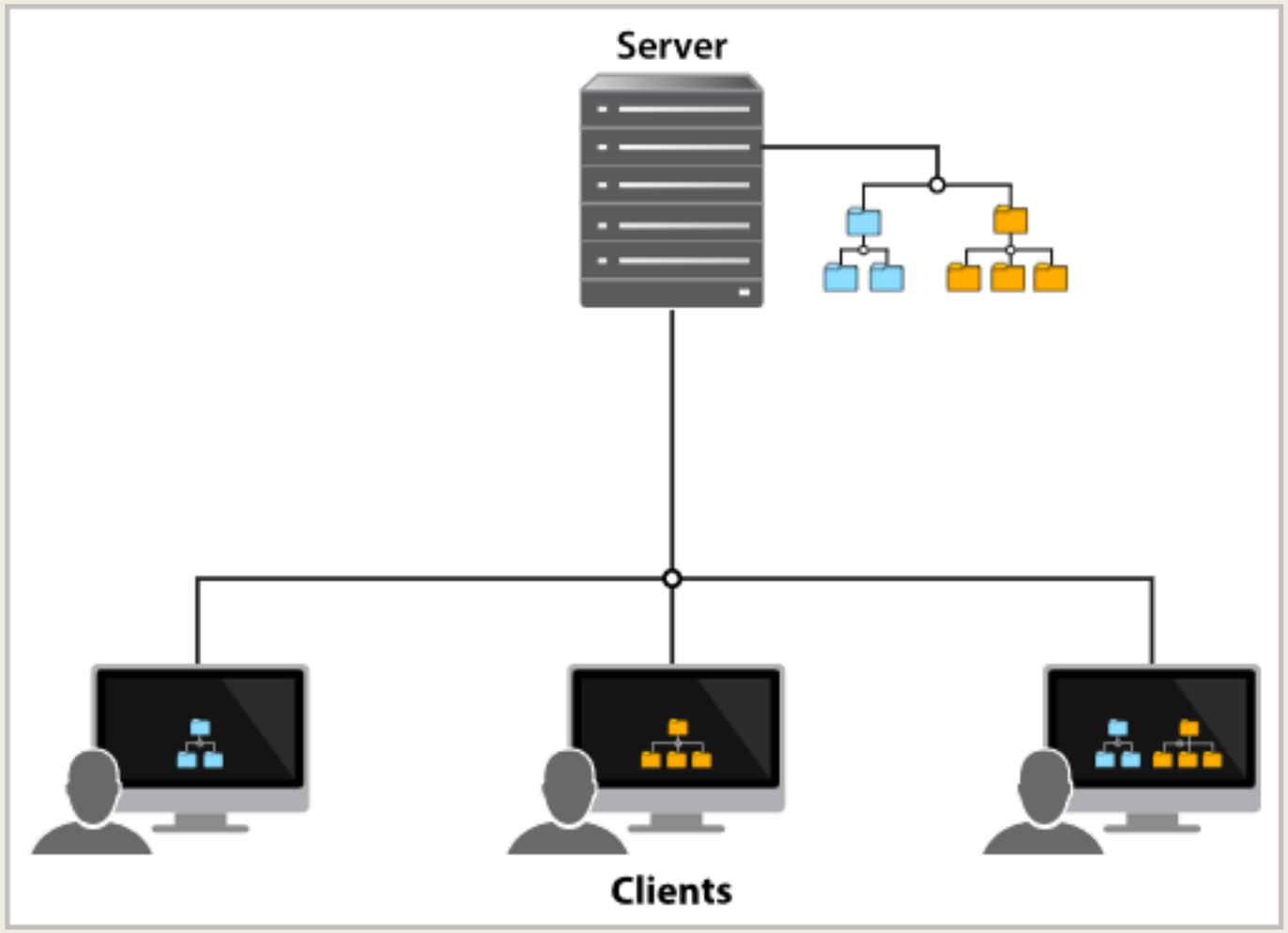


Source of Truth

(Depot)

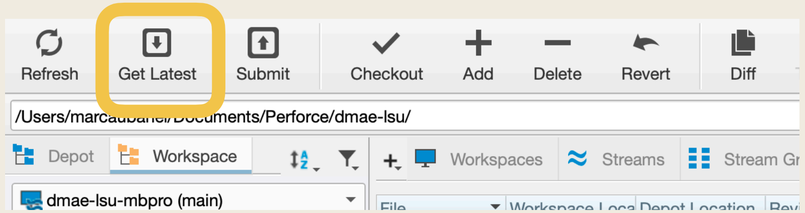
Workspaces

(one workspace per computer)



Source of Truth

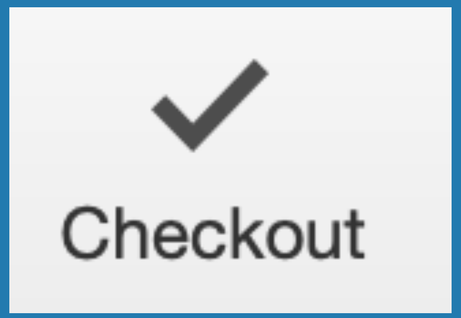
(Depot)



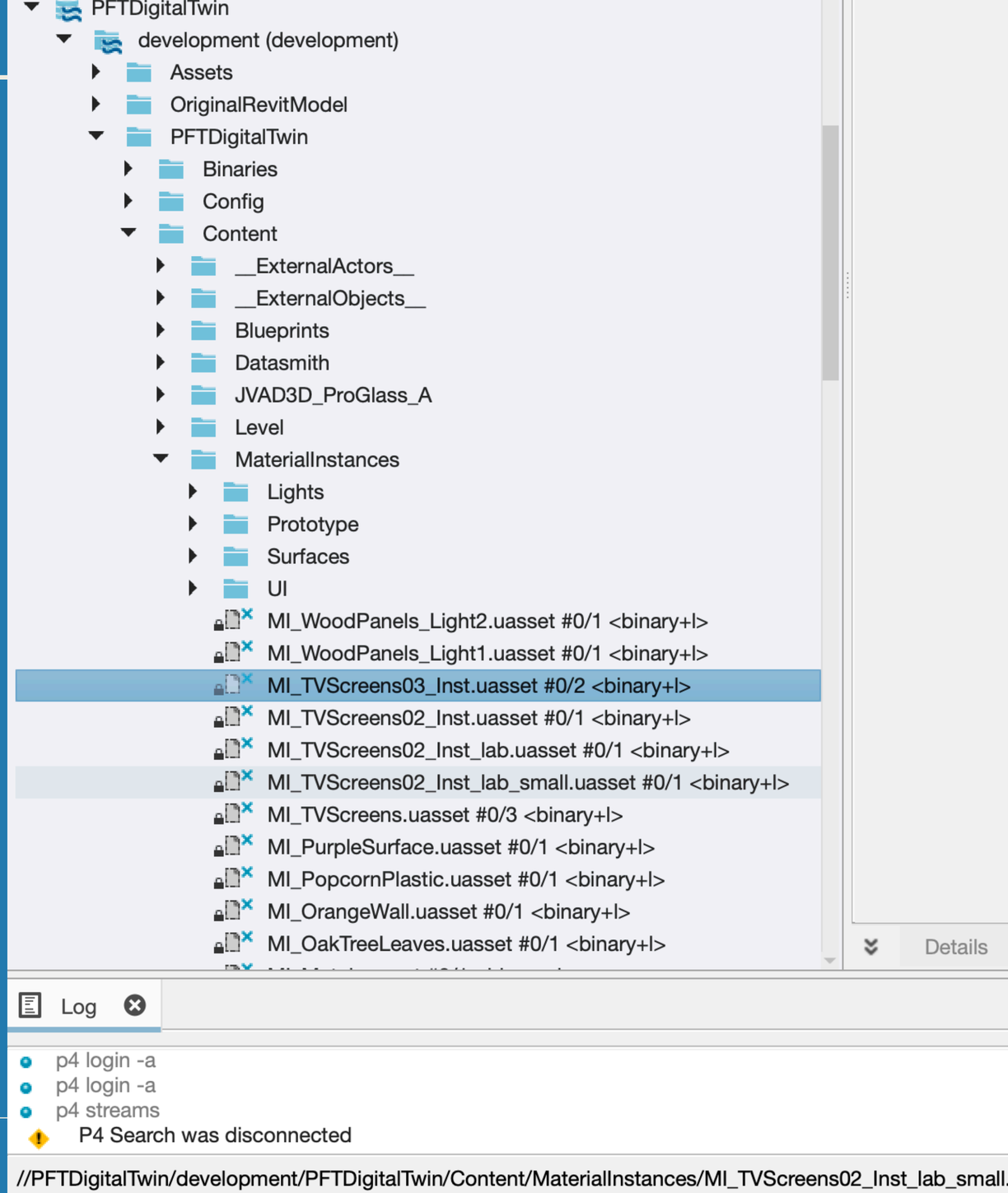
Workspaces

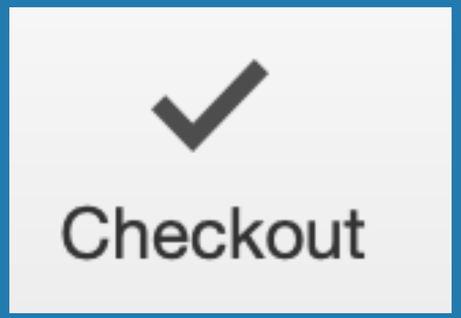
(one workspace per computer)

ALL Files are READ ONLY by default



Binaries Get Locked
Only person who has checked out can write to the workspace





Text files (and other non-binary files can be checked out by everyone then you have to resolve the conflict

dmae-lsu-mbpro (main)

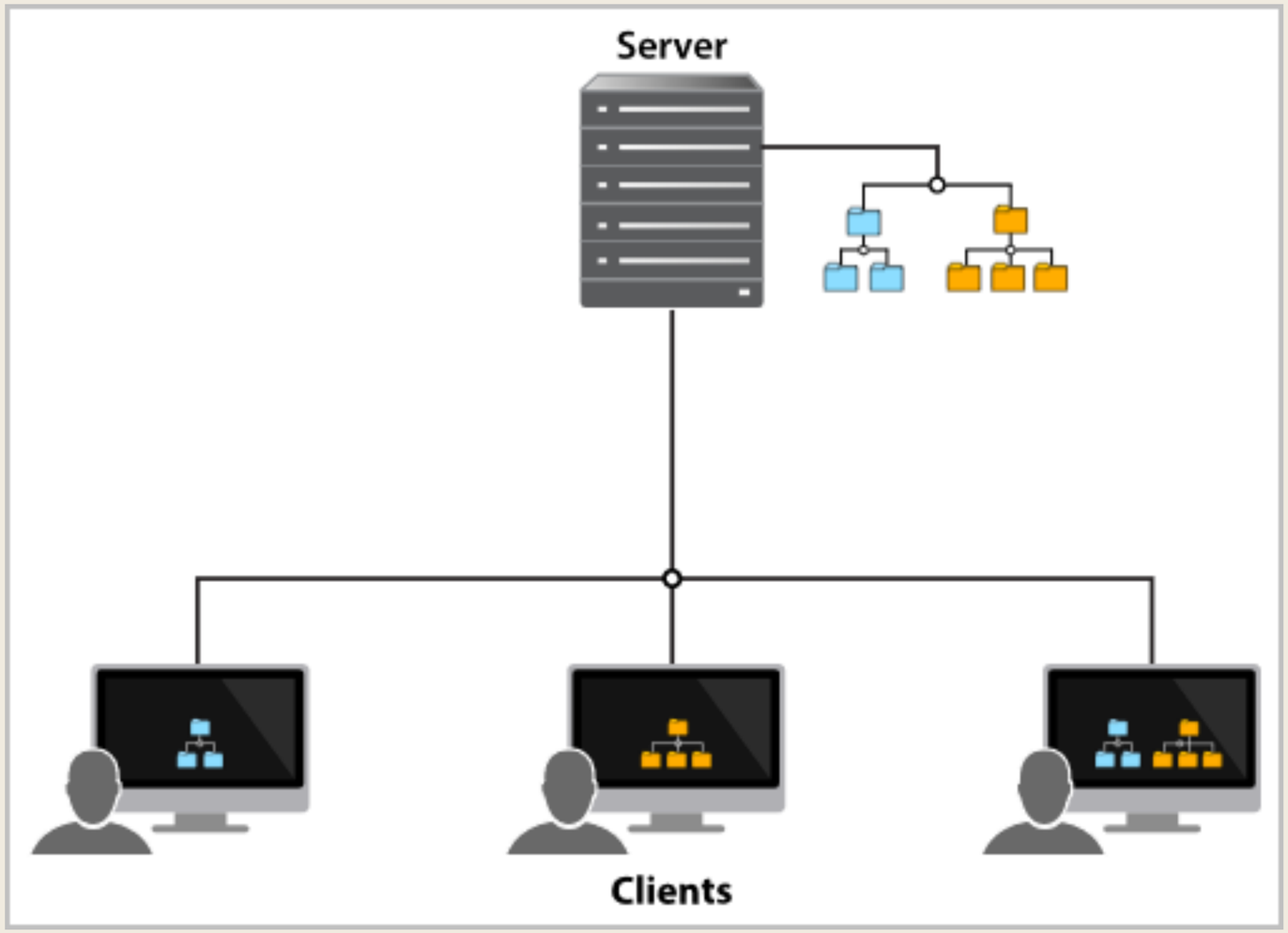
- OutdoorPFT1.png #0/1 <binary+l>
- office.mp4 #0/1 <binary+l>
- LandscapeUnreal.png #0/1 <binary+l>
- HeightMap.png #0/1 <binary+l>
- FlumeDemo.png #0/1 <binary+l>
- DeanReception6.png #0/1 <binary+l>
- DeanReception5.png #0/1 <binary+l>
- DeanReception4.png #0/1 <binary+l>
- DeanReception3.png #0/1 <binary+l>
- DeanReception2.png #0/1 <binary+l>
- DeanReception1.png #0/1 <binary+l>
- RestAPI
- setconfig.bat #0/1 <text+x>
- .p4ignore #0/3 <text>
- main (main)
- scandata (scandata)
- Plague
- Procedural3DClass
- ProjectA
- RacoonRescue
- SCRN4015-CLASS
- Simulation
- SP24-ART2020-VidGameProt
- syngentaTwin
- test
- TestDepot
- UE5-StarterProjects
- UE5Class
- UltraSoundGuidedProcedure
- UnrealTemplates
- Verocity
- VetTraining

//Plague

File	Workspace Loca	Depot Location
setconfi…		//PFTDigitalT…
.p4ignore		//PFTDigitalT…

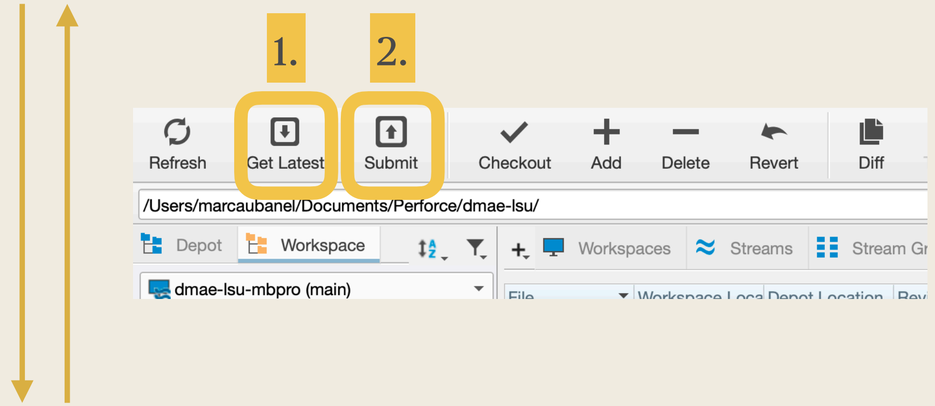
File: //PFTDigitalTwin/development/.p4ignore#3

```
#Visual Studio files
.vs/
*.vsoconfig
*.suo
*.opensdf
*.vcxproj

#Rider Files
.idea/
*.suo
*.user

# Compiled Object files
*.slo
*.lo
*.o
*.obj

# Precompiled Headers
*.gch
*.pch



# Fortran module files
*.mod

# Compiled Static libraries
*.lai
*.la
*.a
*.lib

# Executables
*.exe
*.out
*.app
*.ipa

# These project files can be generated by the en
*.xcodeproj
*.xcworkspace
*.sln
*.suo
*.opensdf
*.sdf
```



Source of Truth

(Depot)



Workspaces

(one workspace per computer)

youtube.com

Home | Sheets | DMAE | HoudWalk | Work | UEDocs | Tuts | Slate | OnlineDT | Yeganeh Portfolio | LSUSched | GambierBuild | DTTwnCrs

https://w... | DMAE Gr... | Edit Secti... | Moodle M... | Course O... | Policy an... | Recordin... | Marc Aub... | Network... | Faro | Po... | Software... | Student F... | Jokey wo... | syngenta... | Perforce &...

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Shorts
Subscriptions

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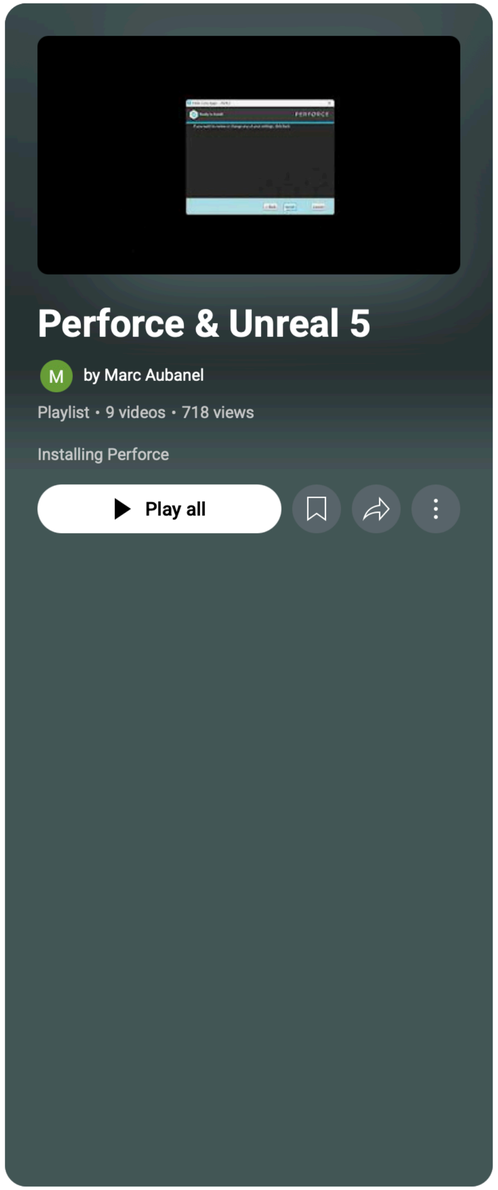
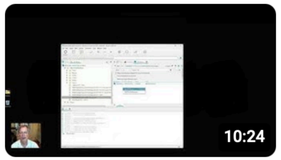
History
Playlists
Your videos
Watch later
Liked videos

Explore
Playables
Shopping
Music
Movies & TV
Live
Gaming
News
Sports
Learning
Courses
Fashion & Beauty



1

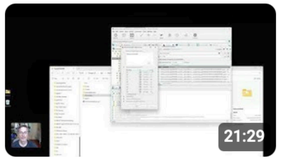
Perforce & Unreal 5 | Part 1: Installing Perforce
Marc Aubanel • 336 views • 9 months ago

2 

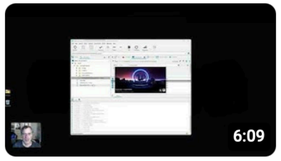
Perforce & Unreal 5 | Part 2 Perforce Workspace UE5
Marc Aubanel • 415 views • 10 months ago

3

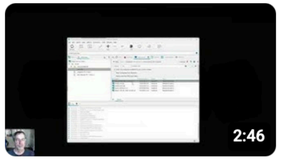
Perforce & Unreal 5 | Part 3: Perforce Environment Variables
Marc Aubanel • 310 views • 10 months ago

4 

Perforce & Unreal 5 | Part 4 P4Ignore
Marc Aubanel • 570 views • 10 months ago

5 

Perforce & Unreal 5 | Part 5 First Time Setting Up Perforce in UE5
Marc Aubanel • 356 views • 10 months ago

6 

Perforce & Unreal 5 | Part 6 Starting Unreal Session with Pe
Marc Aubanel • 146 views • 10 months ago

7
Perforce & Unreal 5 | Part 7 Using Perforce with Unreal
Marc Aubanel • 251 views • 9 months ago

Perforce & Unreal 5 | Part 1: Installing Perforce
Perforce & Unreal 5 • 1 / 9

Task Management Tool

lsudmae.atlassian.net

Home | Sheets | DMAE | HoudWalk | Work | UEDocs | Tuts | Slate | OnlineDT | Yeganeh Portfolio | LSUSched | GambierBuild | DTTwnCrs

https://w... | DMAE Gr... | Edit Secti... | Moodle M... | Course O... | Policy an... | Recordin... | Marc Aub... | Network... | Faro | Po... | Software... | Student F... | Jokey wo... | syngenta... | DMAE25 S...

Jira | Search | + Create

Projects / 24-25 DMAE Assistantships

DMAEMicroscope

Summary | Timeline | Backlog | Active sprints | Calendar | Reports | List | Forms | Goals | All work | Components | Development | Code | Releases | Archived work items | Pages | Shortcuts

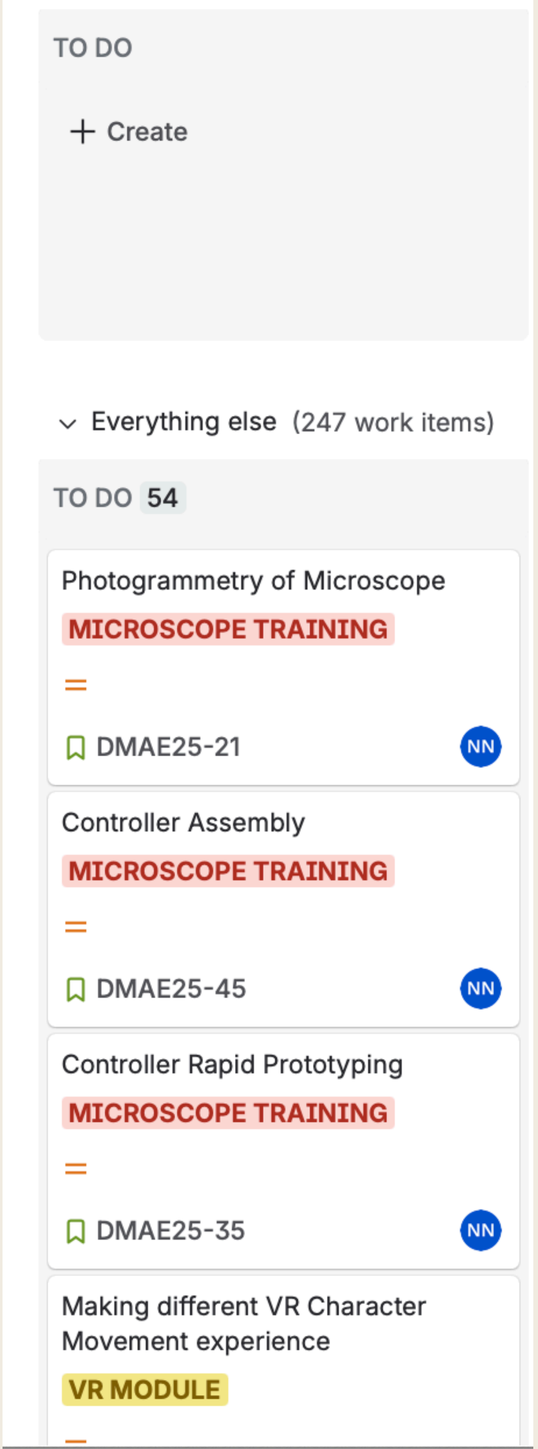
Search board | Epic | Type | Label | Quick filters | Complete sprint | Group: Stories

DMAE25-135 Create task manager for VR Module (1 subtask) VR MODULE IN PROGRESS

TO DO				DONE 1
+ Create				Create multiple tasks to use with the task manager system DMAE25-296

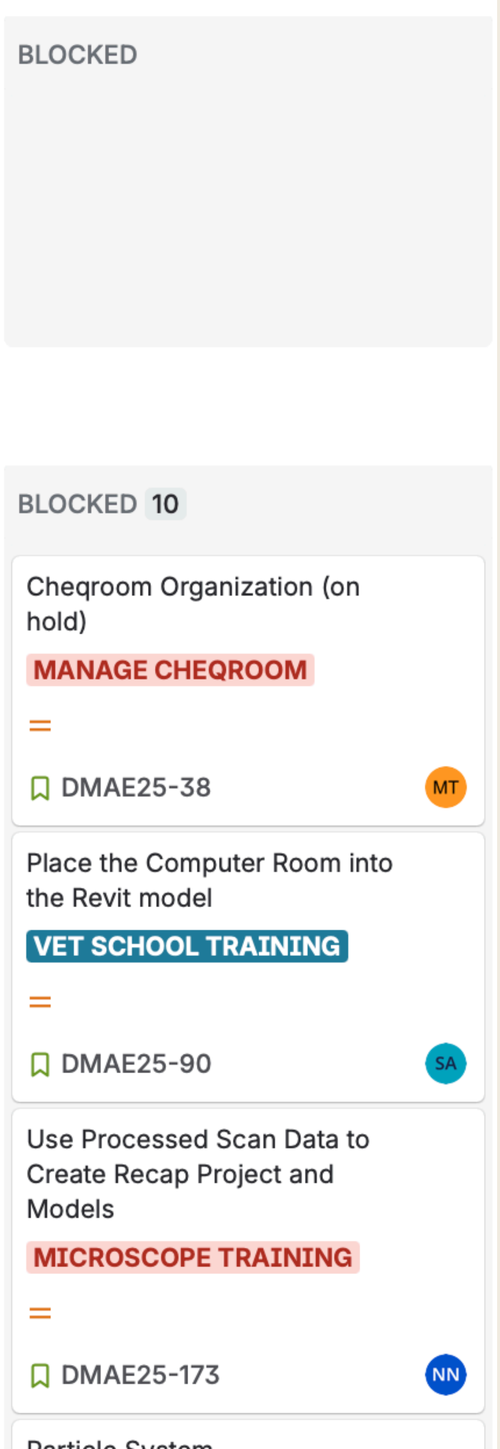
Everything else (247 work items)

TO DO 54	BLOCKED 10	INPROGRESS 51	REVIEW 83	DONE 49
Photogrammetry of Microscope MICROSCOPE TRAINING DMAE25-21	Cheqroom Organization (on hold) MANAGE CHEQROOM DMAE25-38	Blender to unreal research/resources REVIT TO UNREAL DMAE25-17	Update twin Homepage UX NASA-NCAM DMAE25-59	Convert PFT pictures to materials in Unreal. DMAE25-451
Controller Assembly MICROSCOPE TRAINING DMAE25-45	Place the Computer Room into the Revit model VET SCHOOL TRAINING DMAE25-90	Overall Scan to Model Workflow REFERENCE DMAE25-44	Place chairs & tables in 1st floor common area DMAE25-588	Model wonky furniture for PFT DMAE25-455
Controller Rapid Prototyping MICROSCOPE TRAINING DMAE25-35	Use Processed Scan Data to Create Recap Project and Models MICROSCOPE TRAINING DMAE25-173	Research Workflow CAD to Unreal Engine 5.4.4 REVIT TO UNREAL DMAE25-16	Add Chairs & Tables to the common area outside dean's office DMAE25-537	3D modeling PFT outside objects OUTSIDE GEOMETRY OF BUILDING DMAE25-422
Making different VR Character Movement experience VR MODULE DMAE25-57	Particle System MICROSCOPE TRAINING DMAE25-242	UX Game Play Design MICROSCOPE TRAINING DMAE25-41	Complete - Advancements in code a Dynamic Simulation of water in Unreal Engine 5 | Done in Rider IDE SOLAR FARM DT DMAE25-228	GA Meeting 12/06 DMAE25-361
Smooth VR Camera Movement VET SCHOOL TRAINING DMAE25-58	Research Niagra System - Unreal MICROSCOPE TRAINING DMAE25-314	Creating a new UI system MIDDLE LINE PROCEDURE DMAE25-54	In Progress: Add water sim level to Unreal Engine project—this can be moved to done. SOLAR FARM DT DMAE25-257	GA Meeting 1/17 DMAE25-375
Make The main Camera wireless. XR-LAB DMAE25-64	Tool - Auto Collision Mesh Duplication ENGINEERING DMAE25-414	XR Studio XR-LAB DMAE25-98	PFT Short Sequences DMAE25-598	GA Meeting 2/14 DMAE25-443
Setup Rigster on the new computer DMAE25-74	Correcting beam length DMAE25-419	Making the knobs to work on the VR template VR MODULE	Scan Flume Lab SOLAR FARM DT	Foliage Research SOLAR FARM DT DMAE25-405
				Add Collision Avoidance for FreeMovingUser ENGINEERING 1d



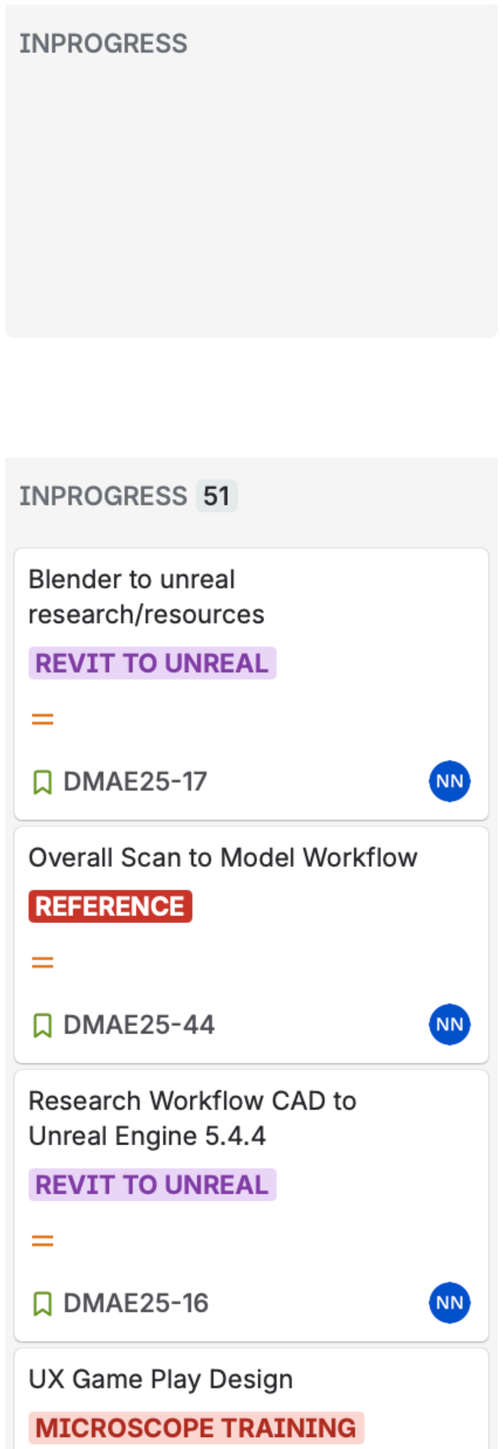
Every Week

- Add tasks for the week
- If tasks take longer than a week break them into smaller chunks
- Be prepared to VERY QUICKLY show your tasks on Fridays



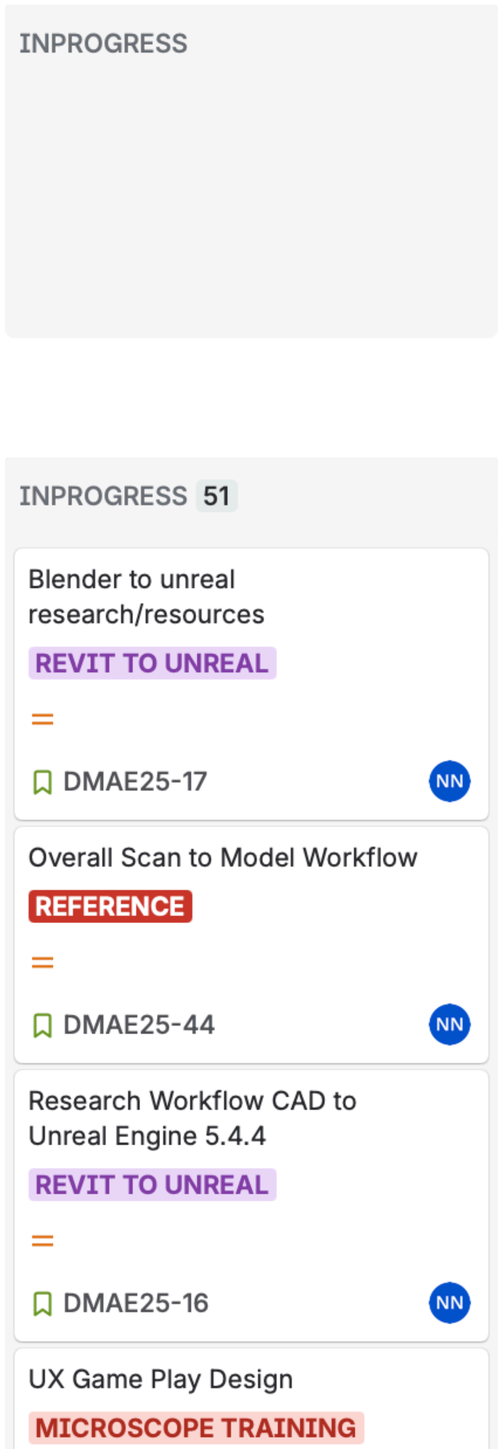
Move To Blocked...

- If the task cannot be completed
  - Waiting on work from someone else
  - Is missing an element not in your control
  - Is stalled by some depenency
  - Any other reason....



Move To In Progress...

- When task is under way
- Don’t wait until you are finished
- You should ALWAYS have a task in progress
- If you don’t know what to do ASK A MENTOR!



Move To In Progress...

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REVIEW

REVIEW 83

Update twin Homepage UX

NASA-NCAM

DMAE25-59 SD

Place chairs & tables in 1st floor common area

DMAE25-588 SA

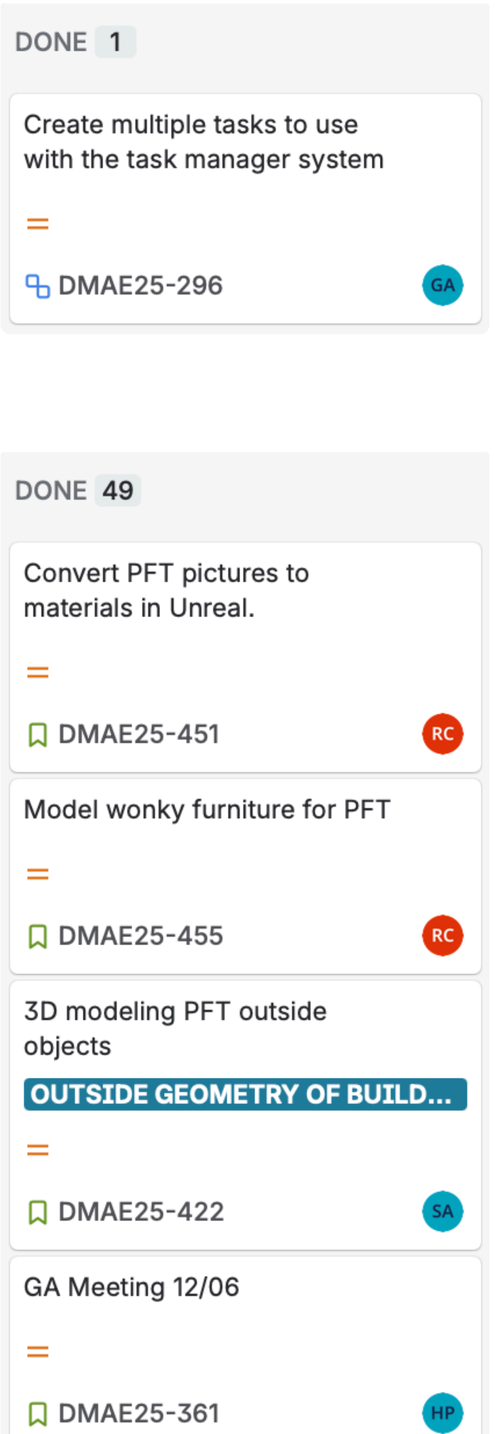
Add Chairs & Tables to the common area outside dean's office

DMAE25-537 SA

Complete - Advancements in code a Dynamic Simulation of water in Unreal Engine 5 | Do...

Move To Review...

- Move to review when task is complete



Move To Done...

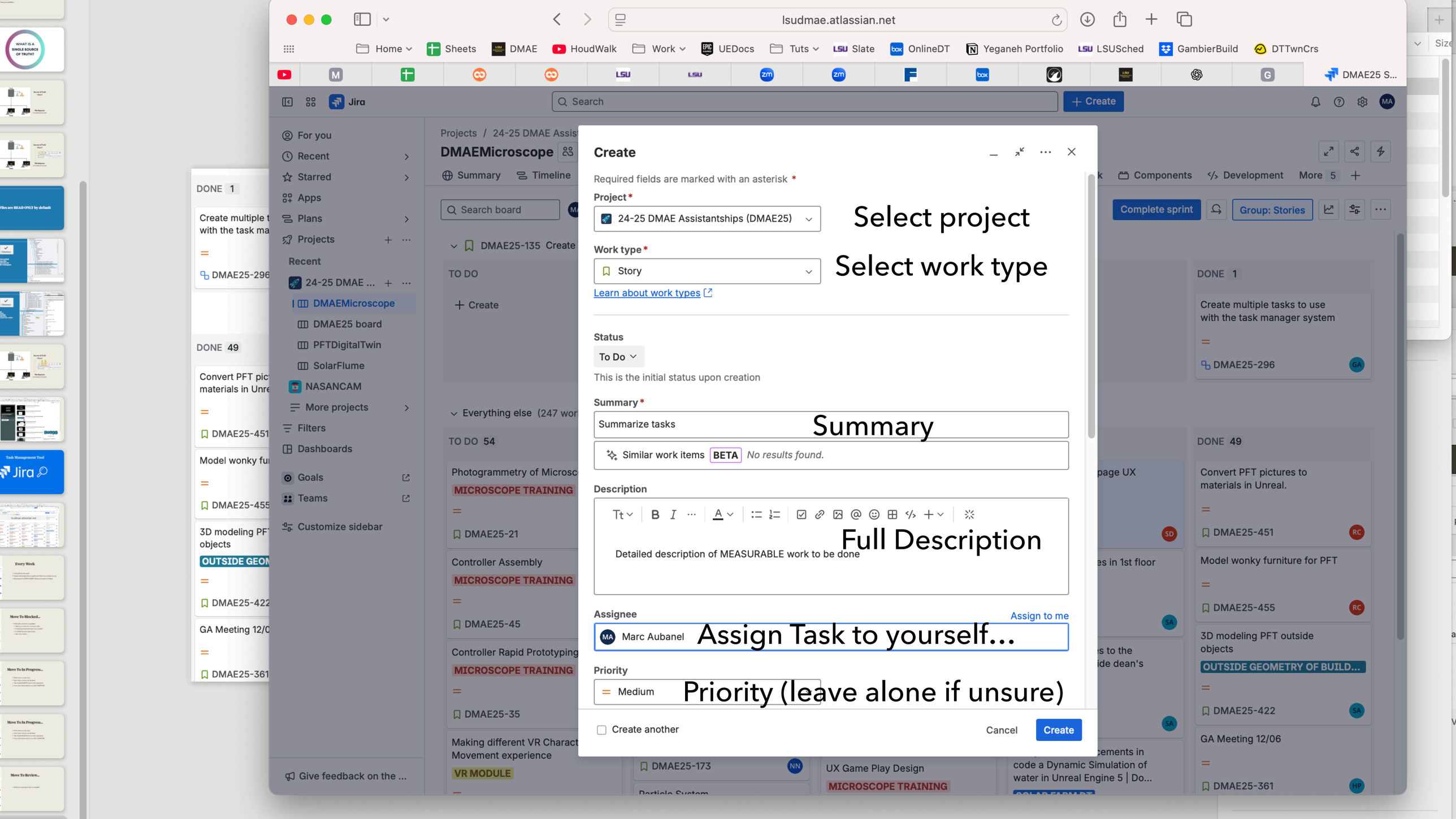
- Every Friday we will split into project groups and present finished work
- Only the project lead / faculty lead will be able to move tasks to done as a form of quality control

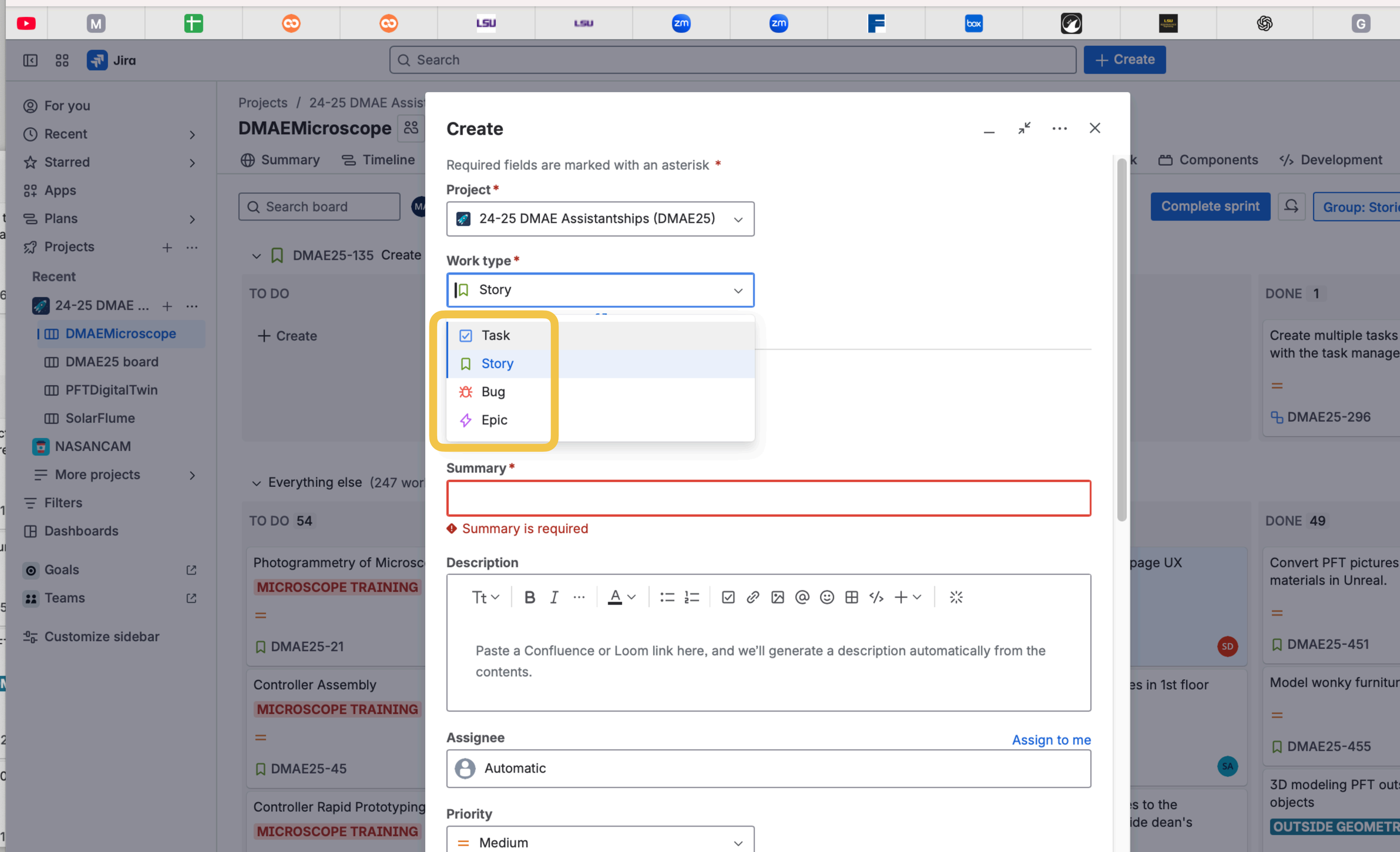
ask manager for VR Module (1 subtask) VR MODULE IN PROGRESS GA

	BLOCKED	INPROGRESS	REVIEW	DONE 1
				Create multiple tasks to use with manager system DMAE25-296

items)

	BLOCKED 10	INPROGRESS 51	REVIEW 83	DONE 49
ope NN	Cheqroom Organization (on hold) MANAGE CHEQROOM DMAE25-38 MT	Blender to unreal research/resources REVIT TO UNREAL DMAE25-17 NN	Update twin Homepage UX NASA-NCAM DMAE25-59 SD	Convert PFT pictures to materials DMAE25-451
NN	Place the Computer Room into the Revit model VET SCHOOL TRAINING DMAE25-90 SA	Overall Scan to Model Workflow REFERENCE DMAE25-44 NN	Place chairs & tables in 1st floor common area DMAE25-588 SA	Model wonky furniture for PFT DMAE25-455
	Use Processed Scan Data to Create Recap Project and Models	Research Workflow CAD to Unreal Engine 5.4.4	Add Chairs & Tables to the common area outside dean's office DMAE25-537 SA	3D modeling PFT outside objects OUTSIDE GEOMETRY OF BUILD DMAE25-422


lsudmae.atlassian.net
Jira
Search
Create
DMAEMicroscope
Create
Required fields are marked with an asterisk *
Project *
24-25 DMAE Assistantships (DMAE25)
Select project
Work type *
Story
Select work type
Learn about work types
Status
To Do
This is the initial status upon creation
Summary *
Summarize tasks
Summary
Similar work items BETA No results found.
Description
Detailed description of MEASURABLE work to be done
Full Description
Assignee
Assign to me
Marc Aubanel
Assign Task to yourself...
Priority
Medium
Priority (leave alone if unsure)
Create another
Cancel
Create


Jira
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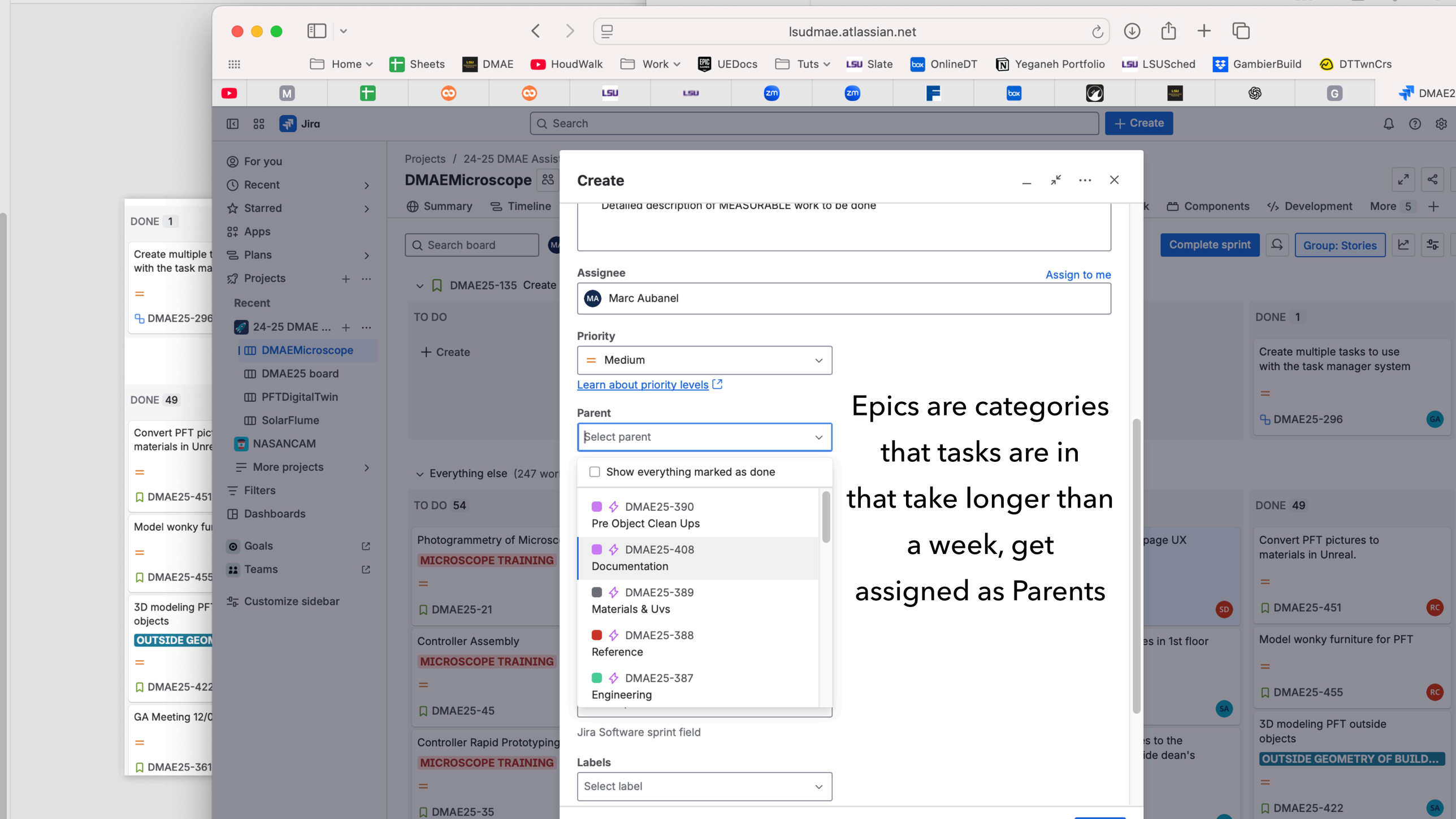
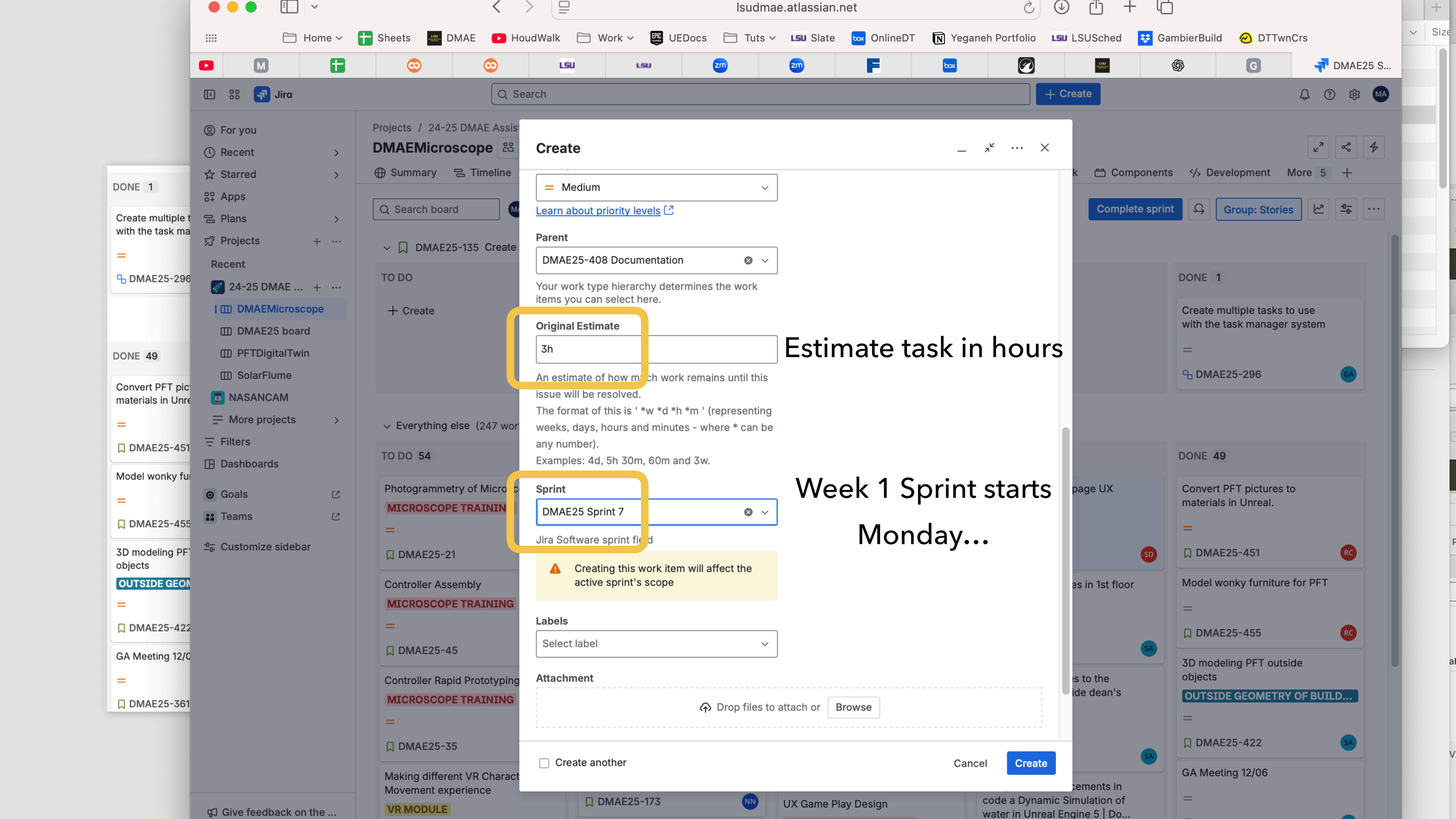
Recent
24-25 DMAE ...
DMAEMicroscope
DMAE25 board
PFTDigitalTwin
SolarFlume
NASANCAM
More projects
Filters
Dashboards
Goals
Teams
Customize sidebar
Projects / 24-25 DMAE Assis
DMAEMicroscope
Summary
Timeline
Components
Development
More 5
Search board
Complete sprint
Group: Stories
DMAE25-135 Create
TO DO
Create
Everything else (247 wor
TO DO 54
Photogrammetry of Microsc
MICROSCOPE TRAINING
DMAE25-21
Controller Assembly
MICROSCOPE TRAINING
DMAE25-45
Controller Rapid Prototyping
MICROSCOPE TRAINING
DONE 1
Create multiple tasks to use with the task manager system
DMAE25-296
DONE 49
Convert PFT pictures to materials in Unreal.
DMAE25-451
Model wonky furniture for PFT
DMAE25-455
3D modeling PFT outside objects
OUTSIDE GEOMETRY OF BUI
Create
Required fields are marked with an asterisk *
Project *
24-25 DMAE Assistantships (DMAE25)
Work type *
Story
Task
Story
Bug
Epic
Summary *
Summary is required
Description
Paste a Confluence or Loom link here, and we'll generate a description automatically from the contents.
Assignee
Assign to me
Automatic
Priority
Medium


lsudmae.atlassian.net
Jira
Search
Create
DMAEMicroscope
Create
Detailed description of MEASURABLE work to be done
Assignee
Assign to me
Marc Aubanel
Priority
Medium
Learn about priority levels
Parent
Select parent
Show everything marked as done
DMAE25-390
Pre Object Clean Ups
DMAE25-408
Documentation
DMAE25-389
Materials & Uvs
DMAE25-388
Reference
DMAE25-387
Engineering
Jira Software sprint field
Labels
Select label
Epics are categories that tasks are in that take longer than a week, get assigned as Parents


Create
Medium
Learn about priority levels
Parent
DMAE25-408 Documentation
Your work type hierarchy determines the work items you can select here.
Original Estimate
3h
An estimate of how much work remains until this issue will be resolved.
The format of this is ' *w *d *h *m ' (representing weeks, days, hours and minutes - where * can be any number).
Examples: 4d, 5h 30m, 60m and 3w.
Estimate task in hours
Sprint
DMAE25 Sprint 7
Jira Software sprint field
Week 1 Sprint starts Monday...
Creating this work item will affect the active sprint's scope
Labels
Select label
Attachment
Drop files to attach or Browse
Create another
Cancel
Create

lsudmae.atlassian.net

Add parent / DMAE25-588

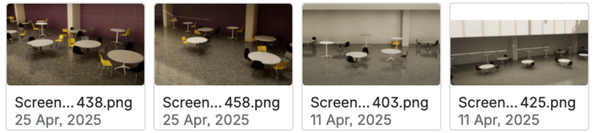
Place chairs & tables in 1st floor common area

Review | Improve work item

Description
Add a description...

Add videos and/or screenshots of work

Attachments 4



Screen... 438.png 25 Apr, 2025 | Screen... 458.png 25 Apr, 2025 | Screen... 403.png 11 Apr, 2025 | Screen... 425.png 11 Apr, 2025

Subtasks
Add subtask

Linked work items
Add linked work item

Activity
All | Comments | History | Work log

Add work description and highlight any issues you encountered to share...

Document historical record (big and small())

Save | Cancel

Details

Assignee	Samira Awad — Assign to me
Reporter	Samira Awad
Development	Set up code tools — PENDING; Open with VS Code; Create branch; Create commit
Releases	Set up deployment tools — PENDING
Labels	Add labels
Sprint	DMAE25 Sprint 7
Priority	Medium
Zoom discussions	Open Zoom discussions

More fields

Original estimate	4h
Time tracking	6h logged
Parent	Add parent

Automation Rule executions

Created April 11, 2025 at 9:50 AM
Updated 9 seconds ago
Configure

Add a description...

Attachments 4

Screen... 438.png
25 Apr, 2025

Screen... 458.png
25 Apr, 2025

Screen... 403.png
11 Apr, 2025

Screen... 425.png
11 Apr, 2025

Subtasks

Add subtask

Linked work items

Add linked work item

Activity

All | Comments | History | Work log

MA

Add work description and highlight any issues you encountered to share...

+ Samira Awad + My-Duyen Tran (Mimi)

Save Cancel

Log time (either shorter or longer than original estimate)

Assignee	Samira Awad Assign to me
Reporter	Samira Awad
Development	Set up code tools PENDING Open with VS Code Create branch Create commit
Releases	Set up deployment tools PENDING
Labels	Add labels
Sprint	DMAE25 Sprint 7
Priority	Medium
Zoom discussions	Open **Zoom discussions**

More fields

Original estimate	4h
Time tracking	6h logged

Automation Rule executions

Created April 11, 2025 at 9:50 AM
Updated 9 seconds ago

Configure

DONE 1

Create multiple tasks to use with the task manager system
DMAE25-296

DONE 49

Convert PFT pictures to materials in Unreal.
DMAE25-451

Model wonky furniture for PFT
DMAE25-455

3D modeling PFT outside objects
OUTSIDE GEOMETRY OF BUILDING
DMAE25-422

GA Meeting 12/06
DMAE25-361

GA Meeting 1/17
DMAE25-375

GA Meeting 2/14
DMAE25-443

Foliage Research
SOLAR FARM DT
DMAE25-405

Add Collision Avoidance for FreeMovingUser
ENGINEERING
DMAE25-411 1d

Correcting beam length
DMAE25-419

Making the knobs to work on the VR template
VR MODULE

Scan Flume Lab
SOLAR FARM DT

Marc will set up seperate projects and permissions this weekend. Start entering tasks after I email your team...

Questions?

Marc, that was way too much...