Backend Elaborated Test Cases (Sprint 2+)

Focus:

- Accessing database & webpage contents
- Search functionality
- 404 page for incorrect URLs

Implementation: Automated testing using tools including JEST, Playwright, Firebase Emulator Suite; continuous integration using GitHub action

- We are still in the process of writing test scripts for automating the tests, so some testings are performed manually. Tests with written test scripts have a tick next to them

Gallery (AC 2)

2b.1: List domain in gallery (successful) ✅

Precondition:

- have an animation stored in the database with fields "description", "name", and "sessionLink"

Test-data:

ID	description	name	sessionlink	thumbnail stored
2b.1.1	There is a robot with two grippers. It can carry a ball in each. The goal is to take N balls from one room to another.	Gripper	🔗 PDDL Editor	yes

Step:

Step	Step detail	expected result	Actual Results	Pass/ Fail/ Not executed/ Suspended
1	Navigate to 🔼 Planim ation Animations	site should open, with Gripper name listed in the gallery	as expected	Pass

2b.2: Search domain (successful) ✅

Precondition:

- have an animation stored in the database with fields "description", "name", and "sessionLink"

Test-data:

- description = There is a robot with two grippers. It can carry a ball in each. The goal is to take N balls from one room to another.
- name = Gripper
- sessionLink = 🔗 PDDL Editor

ID	search value

2b.2.1	full name (Gripper)
2b.2.2	partial name (rippe)
2b.2.3	capitalised (GRIPPER)
2b.2.4	lower case (gripper)

Step:

Step	Step detail	expected result	Actual Results	Pass/ Fail/ Not executed/ Suspended
1	Navigate to 🔲 Planimation Animations	site should open, where the Gripper domain is listed in the gallery	As expected	Pass
2	in the search bar, enter the search values	the domain would remain on the gallery	As expected	Pass

2b.3: Search domain (unsuccessful) ✅

Precondition:

- no animation name contain substring 'asdfghjkl'

Test-data:

- description = There is a robot with two grippers. It can carry a ball in each. The goal is to take N balls from one room to another.
- name = Gripper
- sessionLink = 🔗 PDDL Editor

ID	search value
2b.3.1	asdfghjkl

Step:

Step	Step detail	expected result	Actual Results	Pass/ Fail/ Not executed/ Suspended
1	Navigate to 🔲 Planimation Animations	site should open, where the Gripper domain is listed in the gallery	As expected	Pass
2	in the search bar, enter the search values	no domain should remain on page	As expected	Pass

Documentation (AC 3)

3b.1: View functioin in table (successful) ✅

Precondition:

- have a function stored in the database with fields "briefDescription", "category", "example", "functionName", "youtubeEmbeddingLink", "videoCode", "videoExplanation" stored

Test-data:

all of the following stored in database

briefDescription	category	example	functionName	youtubeEmbeddingLink	videoCode	videoExplanation
This function aligns `obj1` to the middle of `obj2` .	other	(equal (?obj1 x) (function align_middle (objects ?obj1 ?obj2)))	align_middle	▶ `align_middle` demo	(:predicate boarded\n :parameters (? person lift)\n :custom lift\n :effect(\n (equal (? person y) (lift y))\n (equal (? person x) (function align_middle (objects ? person lift)))\n)\n)	The function is used in the elevator domain when a passenger boards the lift. The passenger stands in the middle of the lift.
This function distributes objects along a vertical plane.	distribute	(assign (?obj y) (function distributey (objects ?obj)))	distributey	▶ `distributey` demo	(:predicate city\n :parameters (? city)\n :effect(\n (assign (?city y) (function distributey (objects ?city) (settings (initial 1))\n)\n)	The function is used in the logistics domain when initiating positions of the cities. The 6 cities are distributed vertically.

Step:

Step	Step detail	expected result	Actual Results	Pass/ Fail/ Not executed/ Suspended
1	Navigate to 🔷 Planimation Documentation	site should open, with distributex name and description under distribute section, and align_middle name and description under others function	As expected	Pass

3b.2: Search function (successful) ✅

Precondition:

- have a function stored in the database with fields "briefDescription", "category", "example", "functionName", "youtubeEmbeddingLink", "videoCode", "videoExplanation" stored

Test-data:

all of the following stored in the database

briefDescription	category	example	functionName	youtubeEmbeddingLink	videoCode	videoExplanation
This function aligns `obj1` to the middle of `obj2`.	other	(equal (?obj1 x) (function align_middle (objects ?obj1 ?obj2)))	align_middle	▶ `align_middle` demo	(:predicate boarded\n :parameters (?person lift)\n :custom lift\n :effect(\n (equal (?person y) (lift y))\n (equal (?person x) (function align_middle (objects ?person lift)))\n)\n)	The function is used in the elevator domain when a passenger boards the lift. The passenger stands in the middle of the lift.
This function distributes objects along a vertical plane.	distribute	(assign (?obj y) (function distributey (objects ?obj)))	distributey	▶ `distributey` demo	(:predicate city\n :parameters (?city)\n :effect(\n (assign (?city y) (function distributey (objects ?city) (settings (initial 1))\n)\n)	The function is used in the logistics domain when initiating positions of the cities. The 6 cities are distributed vertically.

enter each of the following

ID	searched value
3b.2.1	full function name (e.g. distributey)
3b.2.2	partial function name (e.g. lign_middl)
3b.2.3	capitalised (e.g. DISTRIBUTEY)

Step:

Step	Step detail	expected result	Actual Results	Pass/ Fail/ Not executed/ Suspended
1	Navigate to 🔗 Planimation Documentation	site should open, with the function name and brief description listed under corresponding category	As expected	Pass
2	enter in the search box the searched values	for 3b.2.1 and 3b.2.3, distributey function should remain under the distribute section. for 3b.2.2, align_middle function should remain under the others section.	As expected	Pass

3b.3: Search function (unsuccessful) ✅

Precondition:

- none of the functions have "asdfghjkl" as a substring

Test-data:

ID	searched value
3b.3.1	asdfghjkl

Step:

Step	Step detail	expected result	Actual Results	Pass/ Fail/ Not executed/ Suspended
1	Navigate to 🔗 Planimation Documentation	site should open, with the function name and brief description listed under corresponding category	As expected	Pass
2	enter in the search box the searched values	no function should be displayed under both others and distribute sections	As expected	Pass

3b.5: View visual properties ✅

Precondition:

- a visual properties with "name", "type", "description" and at least 1 datatype is stored in the database
- customised properties "example" and "notes" stored in database

Test-data:

name	type	description	datatype(s)
x	compulsory	horizontal position of the object on screen	- Integer - NULL

and customised property example and note.

Step:

Step	Step detail	expected result	Actual Results	Pass/ Fail/ Not executed/ Suspended
1	Navigate to ▣ Planimation Documentation	site should open, with the visual property listed under the visual properties section	As expected	Pass

Domain (AC 4)

4b.1: View domain detail (successful) ✅

Precondition:

- have an animation stored in the database with fields "description", "name", and "sessionLink"
- have its thumbnail stored as public/assets/resources/thumbnails/name.png

Test-data:

ID	description	name	sessionlink	thumbnail stored
4b.1.1	There is a robot with two grippers. It can carry a ball in each. The goal is to take N balls from one room to another.	Gripper	🔗 PDDL Editor	yes

Step:

| Step	Step detail	expected result	Actual Results	Pass/ Fail/ Not executed/ Suspended
1	navigate to ▣ Planimation Animations	site should open, with correct name, embedding link, and description	As expected	Pass

4b.2: View domain detail (unsuccessful) ✅

Precondition: none of the domain stored are of name "asdfghjkl"

Test-data:

ID	URL
4b.2.1	▣ Planimation Animations

Step:

Step	Step detail	expected result	Actual Results	Pass/ Fail/ Not executed/ Suspended

1	Navigate to 🔲 Planimation Animations	redirect to 404 error page	As expected	Pass

Function (AC 5)

5b.1: View function detail (successful) ✅

Precondition:

- have a function stored in the database with fields "briefDescription", "category", "example", "functionName", "youtubeEmbeddingLink", "videoCode", "videoExplanation" stored
- if notFunctioning: have 'briefDescription', 'category', 'example', 'functionName' stored

Test-data:

ID	briefDescription	category	example	functionName	youtubeEmbeddingLink	videoCode	videoExplanation	parameters	notFunctioning
5b.1.1	This function aligns `obj1` to the middle of `obj2`.	other	(equal (?obj1 x) (function align_middle (objects ?obj1 ?obj2)))	align_middle	▶️ \`align_middle\` demo	(:predicate boarded\n :parameters (?person lift)\n :custom lift\n :effect(\n (equal (?person y) (lift y))\n (equal (?person x) (function align_middle (objects ?person lift)))\n)\n)	The function is used in the elevator domain when a passenger boards the lift. The passenger stands in the middle of the lift.		
5b.1.2	This function distributes objects along a vertical	distribute	(assign (?obj y) (function distributey (objects ?obj)))	distributey	▶️ \`distributey\` demo	(:predicate city\n :parameters (?city)\n :effect(\n (assign (?city y) (function distributey (objects ?city) (settings (initial 1))\n)\n)	The function is used in the logistics domain when initiating positions of the cities. The 6 cities are distributed vertically.	{defaultValue=20 explanation="governs the space between objects." parameterName="spacebtw"}	

	plan e.									
5b.1.3	Demo not functioning function.	other	I'm not functioning :(	not_functioning						true

Step:

Step	Step detail	expected result	Actual Results	Pass/ Fail/ Not executed/ Suspended
1	navigate to ⬛ Planimation Documentation	site should open, with correct functionName, description, youtube link (if functioning), Parameters (optional) displayed If the function is not functioning, the warning is displayed	As expected	Pass

5b.2: View function detail (unsuccessful) ✅

Precondition:

- none of the function's name contains substring "asdfghjkl"

Test-data:

ID	URL
5b.2.1	⬛ Planimation Documentation

Step:

Step	Step detail	expected result	Actual Results	Pass/ Fail/ Not executed/ Suspended
1	Navigate to ⬛ Planimation Documentation	redirect to 404 error page	As expected	Pass