

Spacecarafe Modeling



- similar to apt (linux package manager)

- sources.list in user://mods

| installation of packages

| → package name git-repo-links

①

3.

prebuilt | source code

↳ standard

→ --source-code

w

z

3

Standard: branch ~~master~~ release

or → --branch {branchname}

(--branch release) (init package)

t

z

3

- add-sources from other sources.list

| → add-sources git-repo-links

| { contains sources.list } ↳

| → merges sources.list remote and local

3

- package name configured multiple times

| → warning with option withrepo to

choose from → it lets the other one

Example commands using all features

Installing package: package install mod1 --branch release
-- source-code

Adding sources: package add-sources https://www...git

- Removing packages

Deletes package completely from
Filesystem (deinsts package)

- Deactivating packages \leftrightarrow Activating Packages
(-its package)

Deactivates package without removing

it from the filesystem (deinsts package)

Example commands

Removing: package remove mod1

Deactivating: package deactivate mod1

Activating: package activate mod1

- Reinitialising packages

calls the `__init__()` method of the
"Root-work"

- Deinitializing packages

calls the `_deinit()` function
of the "Root-node"

example commands

package init mod1

package deinit mod1

~~Specificate~~

Mods → structure

root (~~Spatial~~) Folder (res://)

└ Parts (~~Spatial~~) Folder

 └ part_name (~~Spatial~~) Folder

 └ collisionShape

 └ meshInstance

Part_name.tscn

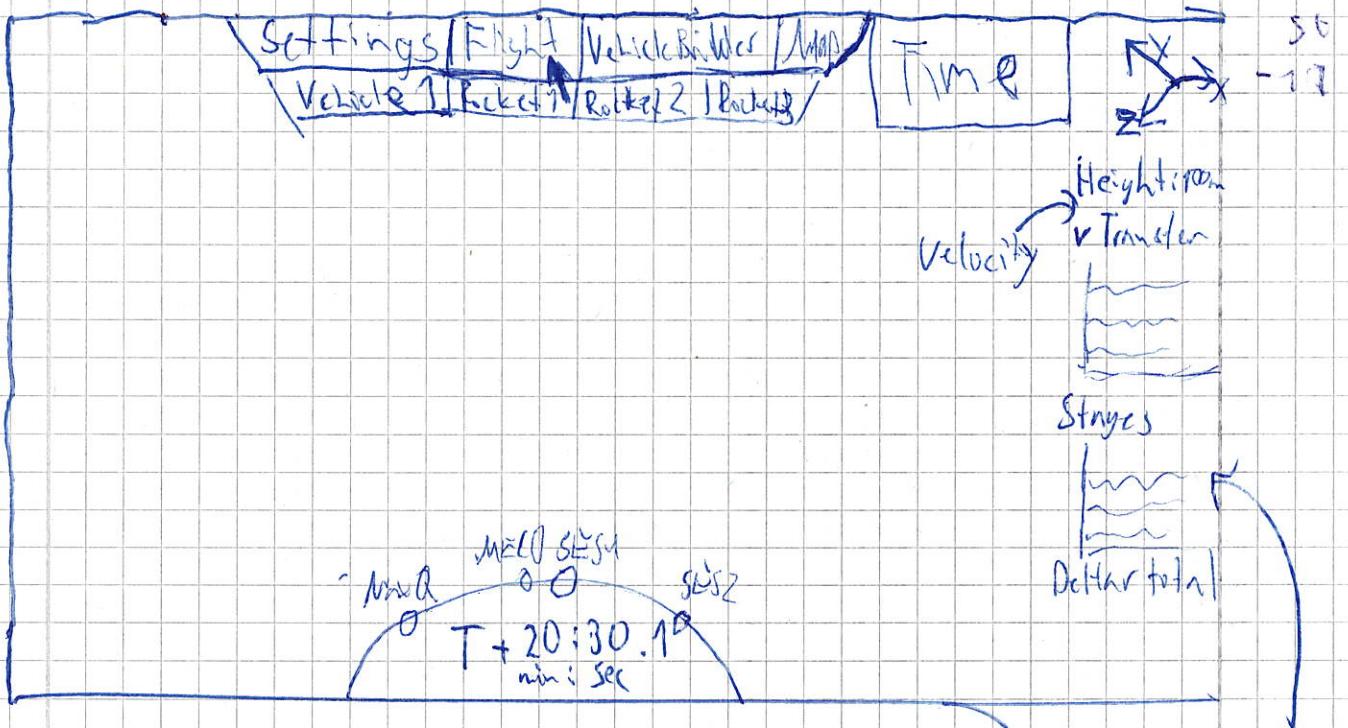
or softbody

:

└ Planets (~~Spatial~~) Folder

 └ planet_name (~~Gravity Object~~) Scene

└ Creatures (~~Spatial~~)

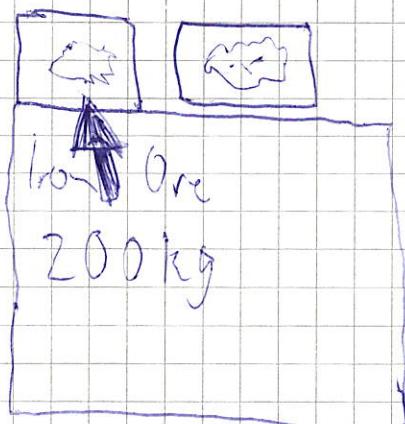


$$\Delta V = V_E \cdot (M_{\text{init}} - M_{\text{exit}})$$

1 / s $\rightarrow 9.8$

ΔV
fuel %

Materials

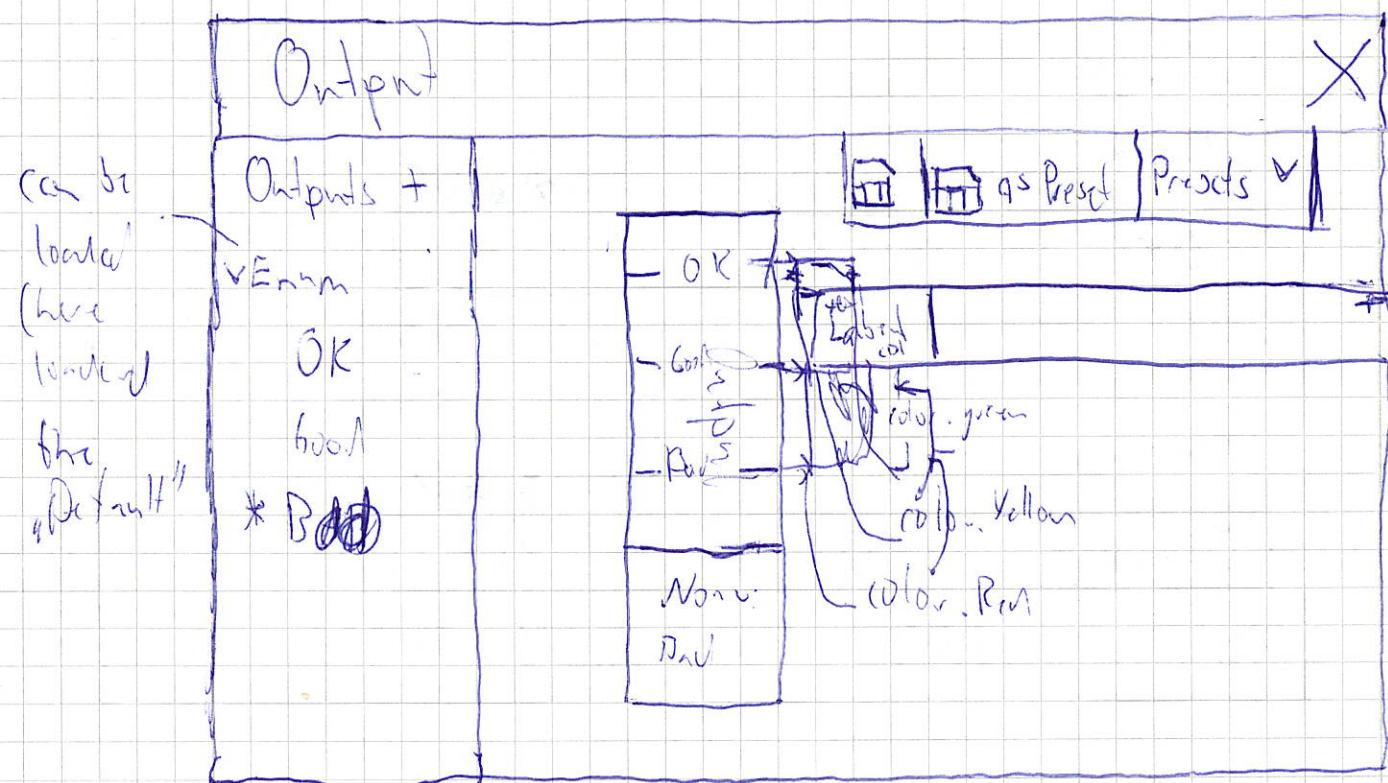
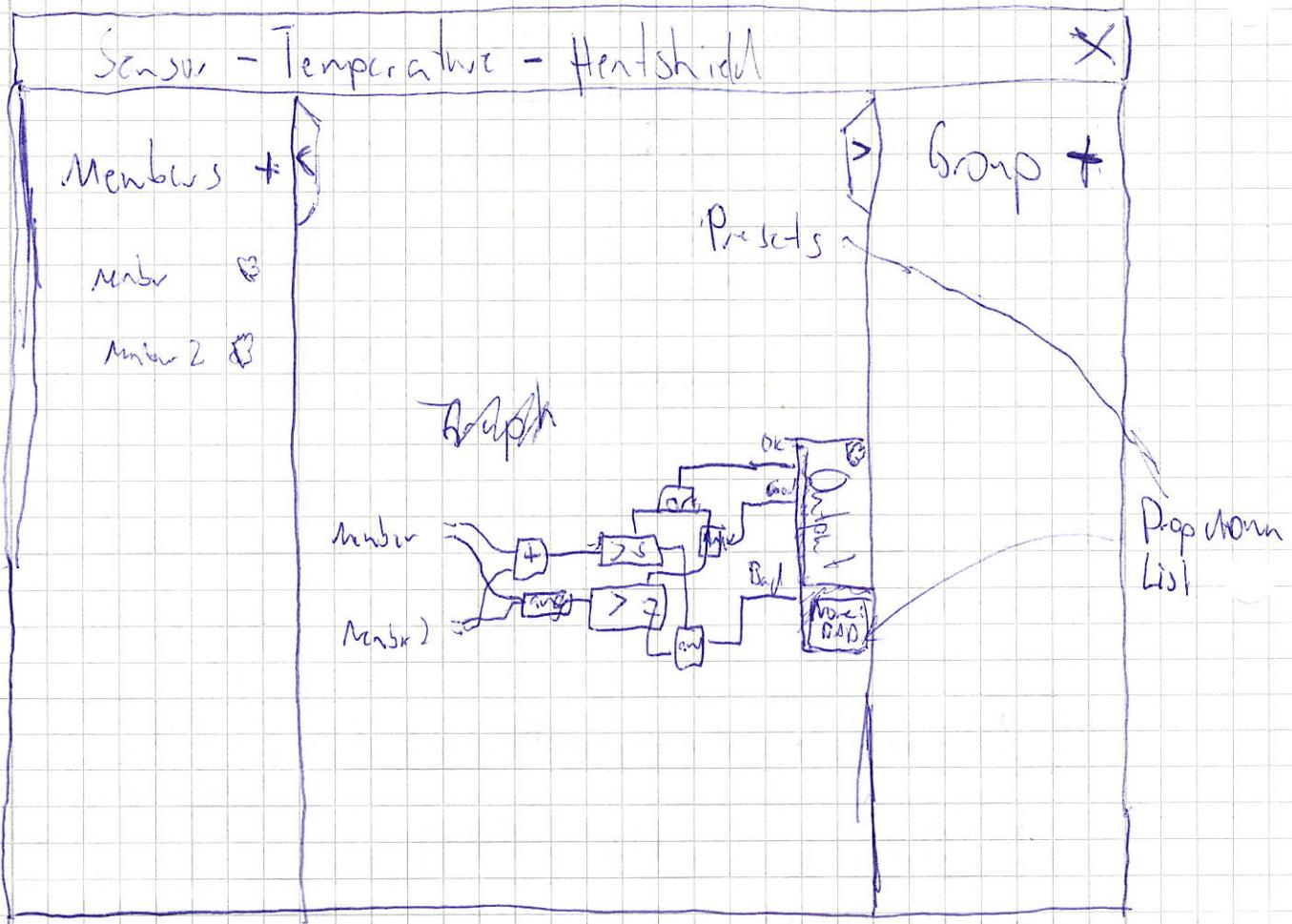


Sensor - Settings - Popup

add scrollbar if necessary

Sensors - Temperature - Heatshield - HS_R1_S1		X
OK	DAMAGED	+ ↕ +
-20°C	50°C	700°C
Profiles:		Temperature -
Liftoff		Heatshield -
OK	DAMAGED	select ↘
-20°C		700°C
Reentry		select ↘
Damaged	OK	(RIT)
-20°C	70°C	200°C 700°C

Group - Settings - Popup



Ship info

sort by stages

Booster

Fuels ━━━━ 78% 260 kJ

Nitrogen (Liquid) ━━━━ 50% 50 kJ

Hydrogen (Liquid) ━━━━ 40% 80 kJ

Oxygen (Liquid) ━━━━ 40% 80 kJ

Engines ━━+ 70% 420 kN $\text{EUR} \frac{\text{m}}{\text{m}} = 1.4$

Groups

Center ━━━━ 100% 70 kN

1st Ring ━━━━ 100% 140 kN

2nd Ring ━━━━ 100% 210 kN

➤ Single

Thrusters ━━+ 100%

Groups

small ━━━━ 100%

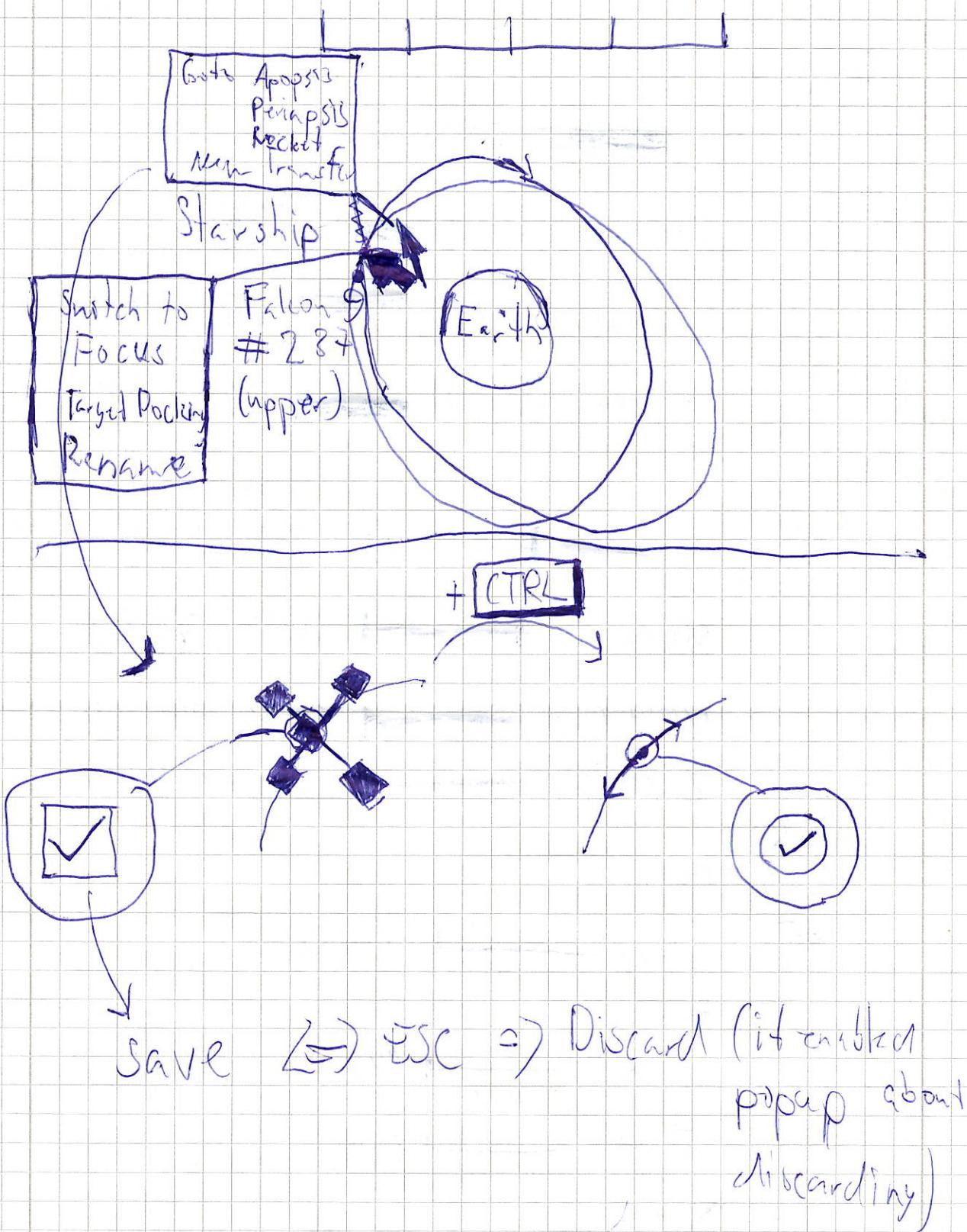
big ━━━━ 100%

➤ Single

Grid fins

(see Thrusters)

⑧ Map screen



(camera movement ⇨) Godot Editor

Landing legs

> Single

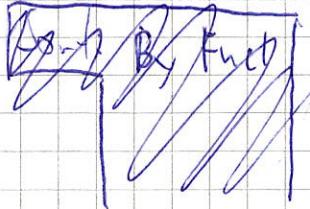
No Groups

Becker & the

Player didn't

define one

Decker



Tanks



78% 200 kJ

Groups

Thrusters



100% 20 kJ

Mach



40% 180 kJ

> Single

Power



70% 15 MJ

Groups

~~Front~~

Front



97% 12 MJ

Rear



50% 3 MJ

> Single

Networks

Fuel

Graph Edit

Acknowledgements

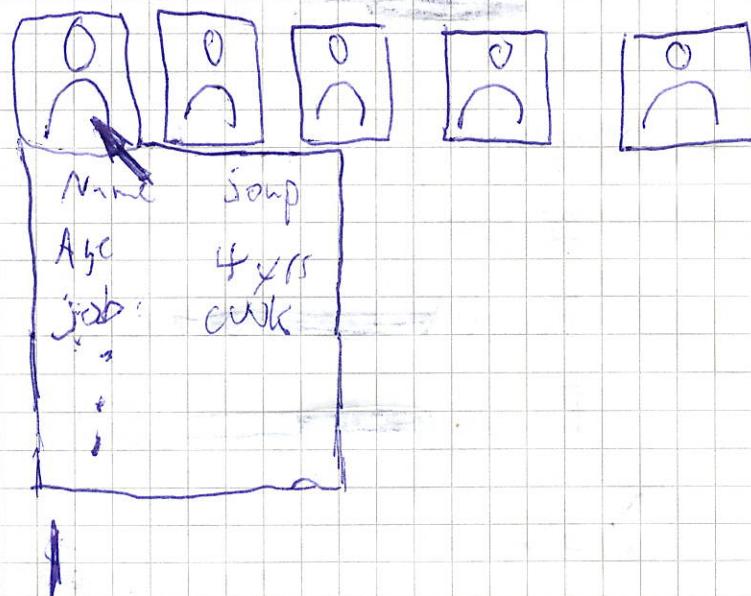
Power

Graph Edit

Communication

Graph Edit

Crew



Sensors

Groups

Comment: you could group them into groups to

Temperature OK 97% ☀

Heat shield OK 99% ☀

HS-R1-S1 200°C OK ☀

HS-R1-S2 290°C OK ☀

HS-R1-S3 200°C OK ☀

HS-R2-S1 205°C OK ☀

Tanks OK 99% ☀

Oxygen OK 100% ☀

Main Alley 20% OK ☀

Room 1 70% OK ☀

Same Sensor

Five + CO₂ OK OK ☀

Main_Alley NO 7% OK ☀
PPM :

Connectivity

Ground OK 5/8 ☀

Cal-1 2% OK

Cal-2 2% OK

Texas-1 5% OK

Texas-2 7% OK

;

Space OK ⚡

ISS OFF

Starlink #75869 0% OK 🌎

Starship 0% OK ↗

Computers

Nav-1 OK ⚡

Temp OK ⚡

CPU 72 °C ⚡

GPU 37 °C ⚡

RAM 37 °C ⚡

STATE: ~~idle~~ working

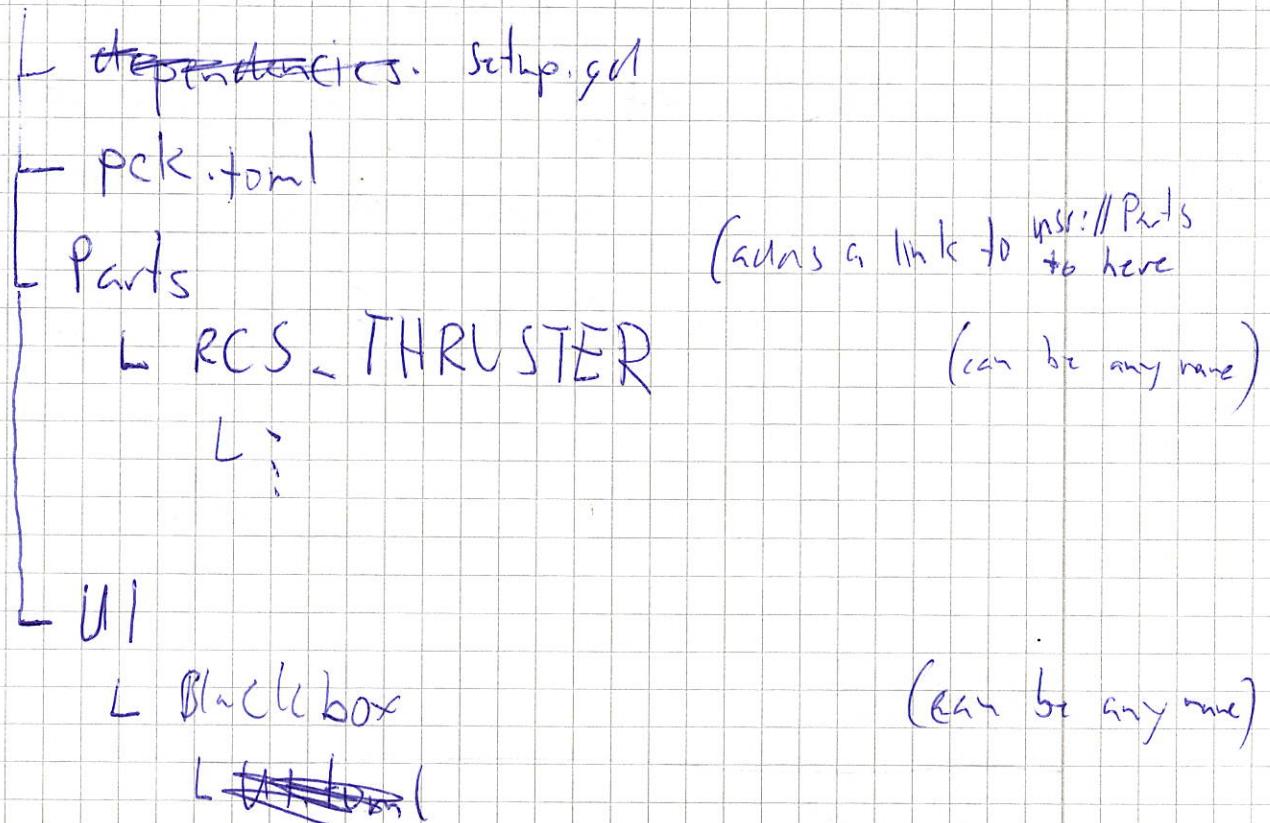
LOAD: 30 %

LAN: Online

Nav-2 OK ⚡

Engine PC ⚡

PCK architecture:



pck.toml

[package]

name = "test-pck"

version = "0.1.0"

edition = "stable"

authors = "Karanesh"

description = "Test!!!"

documentation = "TEST"

readme = " / README.md"

homepage = "test.io"

repository = "github.com/test"

license = "The GMU.."

license-files = "LICENSE"

keywords = ["hey", "test"]

categories = ["label1", "tests"]

exclude, include

setup-script = "setup.gd"

[dependencies]

TEST-Hello = "1.2.1" # see Rust Docs

another one => version = "1.3", registry = "github.com"
branch = "release" / ~~feature~~ ~~another self~~

config = { Hello.world = false }

standalone: false

Behavior

Setup.yol:

extends Package

func - init():

Doll.ComponentServer.set("TreeItemExpand", loadPath)

Doll.ComponentServer.add-comp("DockingInfo")

throws
was it
already existing

The ComponentServer tracks all changes to Components
(who added it, who depends on it) and removes it if uninstalled