Computational Physics Post Training

PC BINUS

E>Project>PPE Web di copy dlu ke data D:

Kalo misalnya pythonnya di atas 3.7
Hapus versi django dan numpy nya

CTRL + SHIFT + P > Python Intrepreter > Comp Physics
atau
py -3.7 -m venv environments/computational_physics
environments\computational_physics\Scripts\activate.bat

For first time running:
python manage.py makemigrations simulations
python manage.py migrate
python manage.py runserver

1. Voltage Source -> Sumber Listrik
2. Resistor -> Penghambat
3. Sumber Listrik -> Capacitor -> Rangkaian kita (menyimpan tegangan listrik/batere)
4. Inductor -> Menstabilkan arus listrik
5. Wire -> Kabel
6. Ammeter -> Mengukur arus litrik
7. Voltmeter -> Mengatur tegangan listrik

Drawing Circuits Topology

Constraint Design:
! Bikin design yang biar dia bisa looping

ComponentType rules

1. It is a reserved value
2. Better to spread the design
3. junctions are connected by ‘wire’ only
4. You must complete the loop, incomplete loop is illegal

a) Wire (connector, has to be adjacent)
b) Resistor_ComponentName
c) VoltageSource_ComponentName
d) Ammeter_ComponentName
e) Voltmeter_ComponentName

ComponentName Rules:

1. Do not use another _ or any special character
2. Combination of string+number is advised
3. Redundancy ComponentType_ComponentName are unnaceptable

Resistor_feeder = parasitive_resistance
Tujuannya, biar kita tahu, setidaknya ada R di variabelnya

Arah positive polarity

Postitive Polaritynya ke arah setelahnya, dari ammeternya, terus kita edit-edit cellsnya
Ammeter = searah
VoltageSource = searah
Voltmeter = berlawanan
Capacitor = berlawanan

Katode polarity
Dioda = Searah hasil tegangan positif, berlawanan hasil tegangan negatif

Parasitve (resistor feeder)

kita jadiin 0.01

Voltage Source

Volt * sqrt(2) = Peak voltage
Voltage frequency -> Setiap negara beda, default 60

Voltage Meter

Rated voltage

To run

1. **Plot title:** PT1
   Ammeter_load -> iload
   Ammeter_source -> isource
   Voltmeter_load -> vload

ammeter