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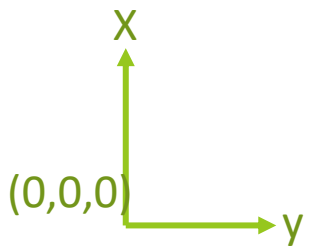
Weekly Review

25/05/21

- **Tasks**
- Run with new action – corner in policy X – *Losses still increase*
- Write a stable baselines implementation
- **Problems**
- Learning results unexpected
- Memory gets saturated in Stable Baselines implementation
- **To-Do Items for Next Week**
- Make stable baselines implementation work
- Show code corresponding to learning plots
- Add all hyperparameters used

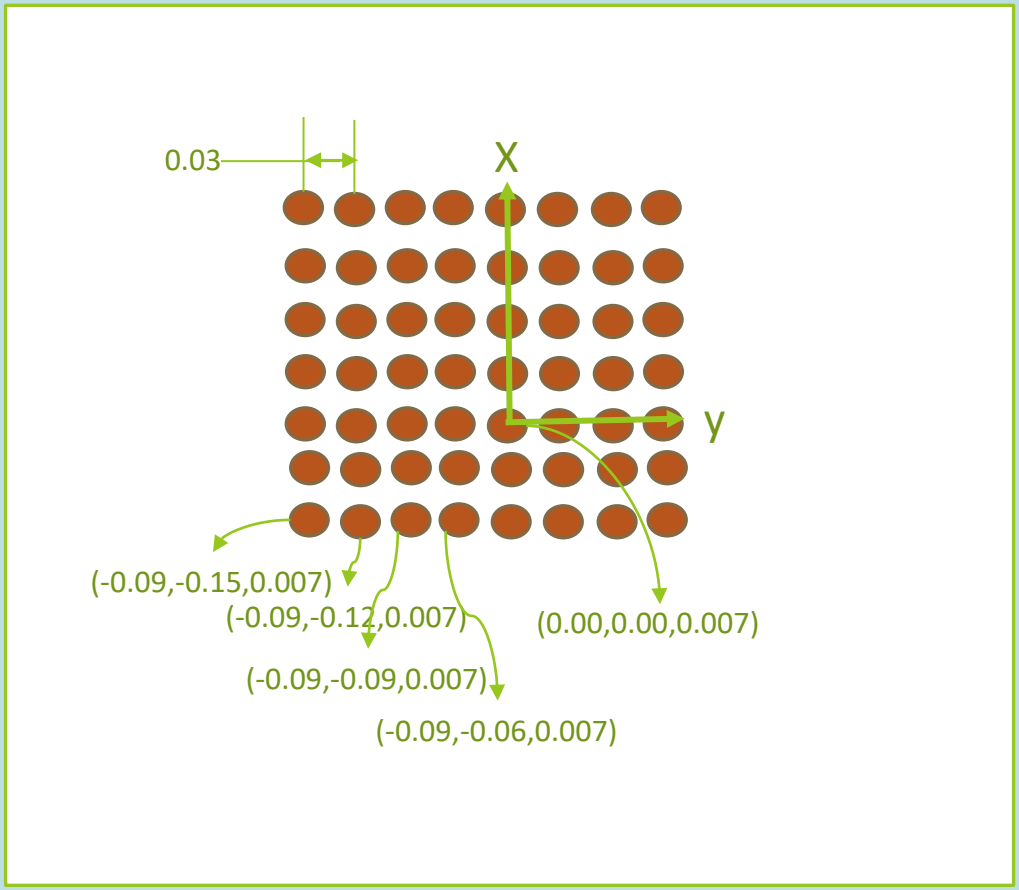
Weekly Review

25/05/21



Weekly Review

25/05/21



Defined in cloth_corner.xml

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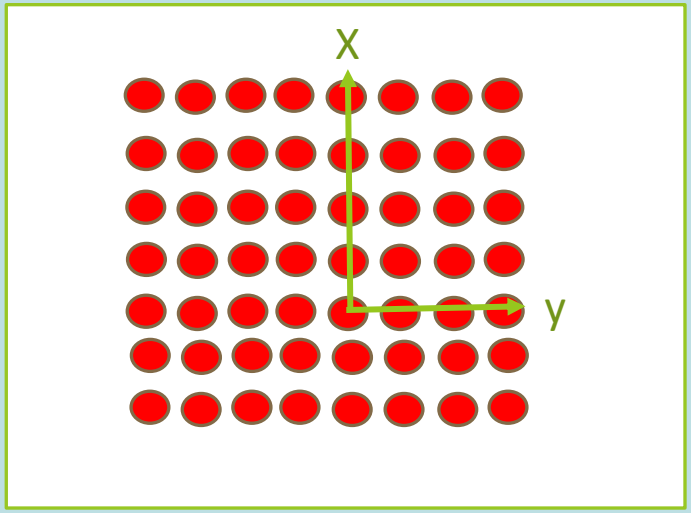
Weekly Review

25/05/21

State

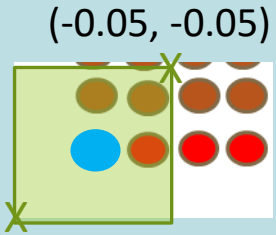
Exp : Cloth_corner.py



Action [-1, -1, -1] to [1, 1, 1] *on 1 random corner*

OR [X, X, X, X, -1, -1, -1] to [X, X, X, X 1, 1, 1]
Where XXXX is a one hot representation of a corner
[1,0,0,0] – Corner 1
[0,1,0,0] – Corner 2
[0,0,1,0] – Corner 3
[0,0,0,1] – Corner 4

To environment scale = *0.05
Force applied = proportional to the distance to be moved

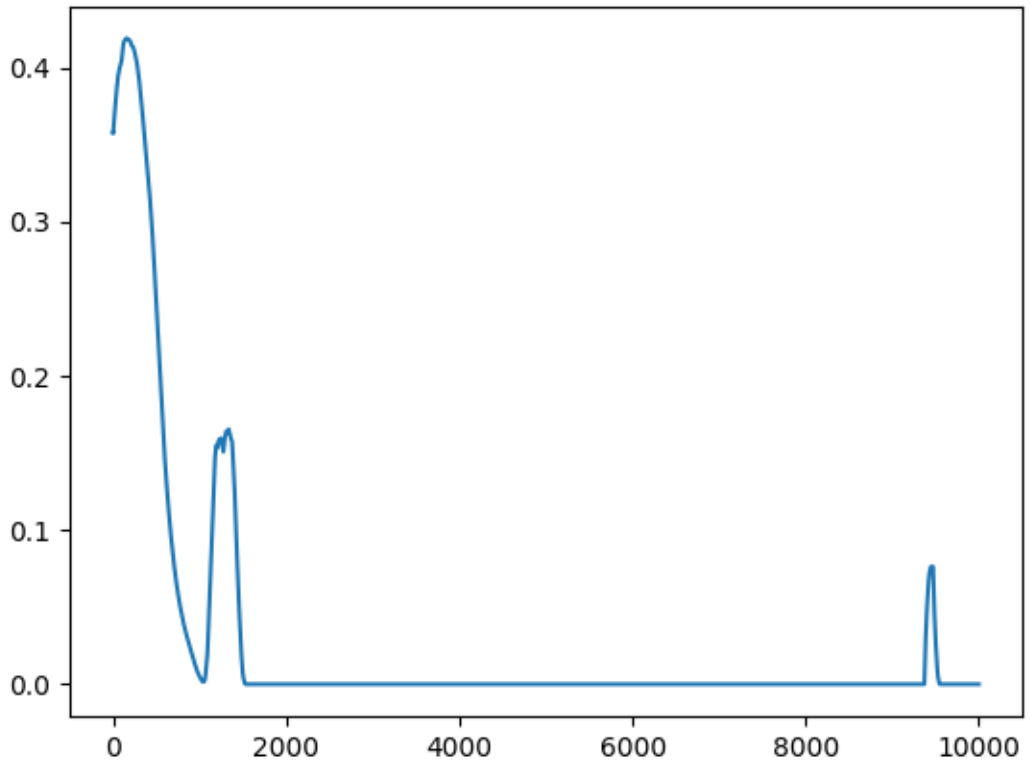


Weekly Review

1 step = no. of steps in 1 episode / game

25/05/21

Reward



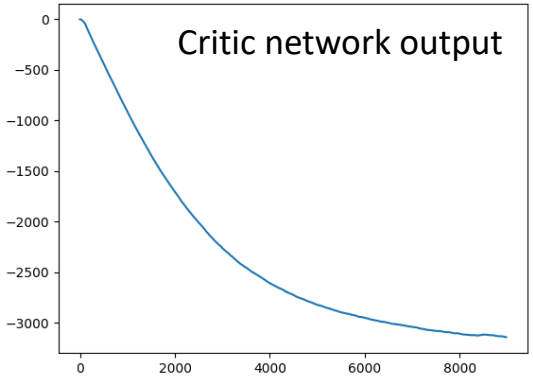
No. of steps

Weekly Review

1 step = average value over 1 batch

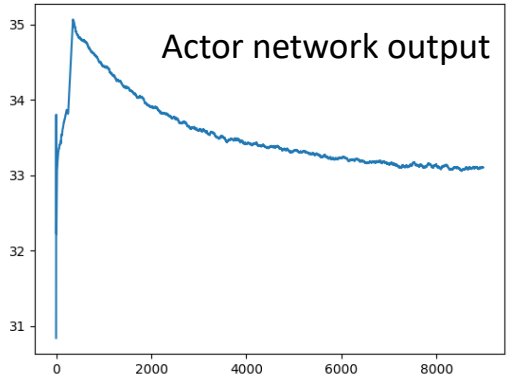
25/05/21

Critic value



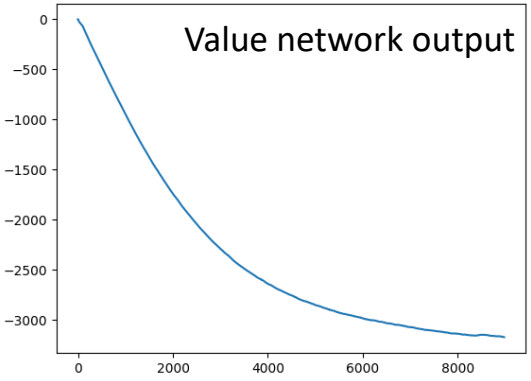
No. of steps

entropy



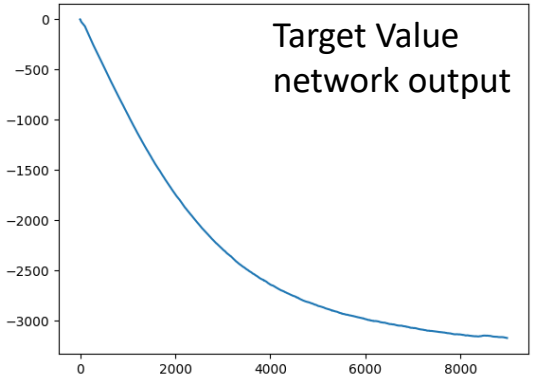
No. of steps

Value



No. of steps

Target Value



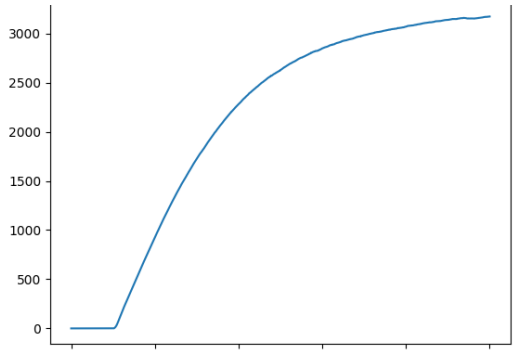
No. of steps

Weekly Review

1 step = loss after 1 batch

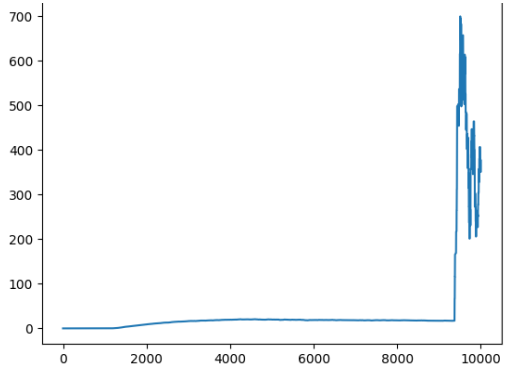
25/05/21

Actor loss



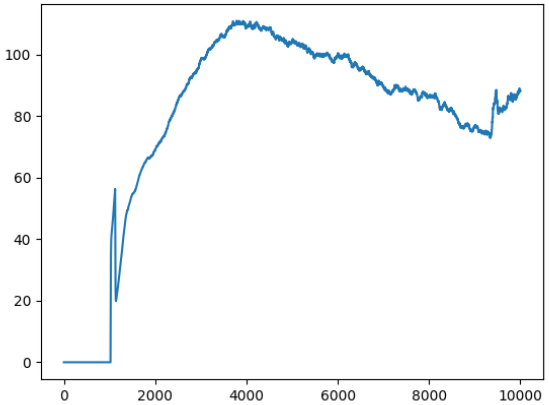
No. of steps

Critic loss



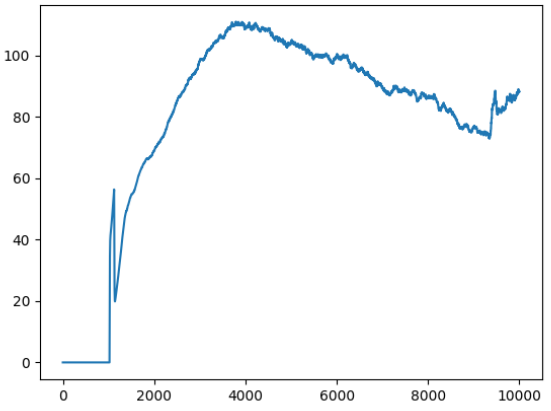
No. of steps (batch_size)

Value loss



No. of steps (batch_size)

Target Value loss



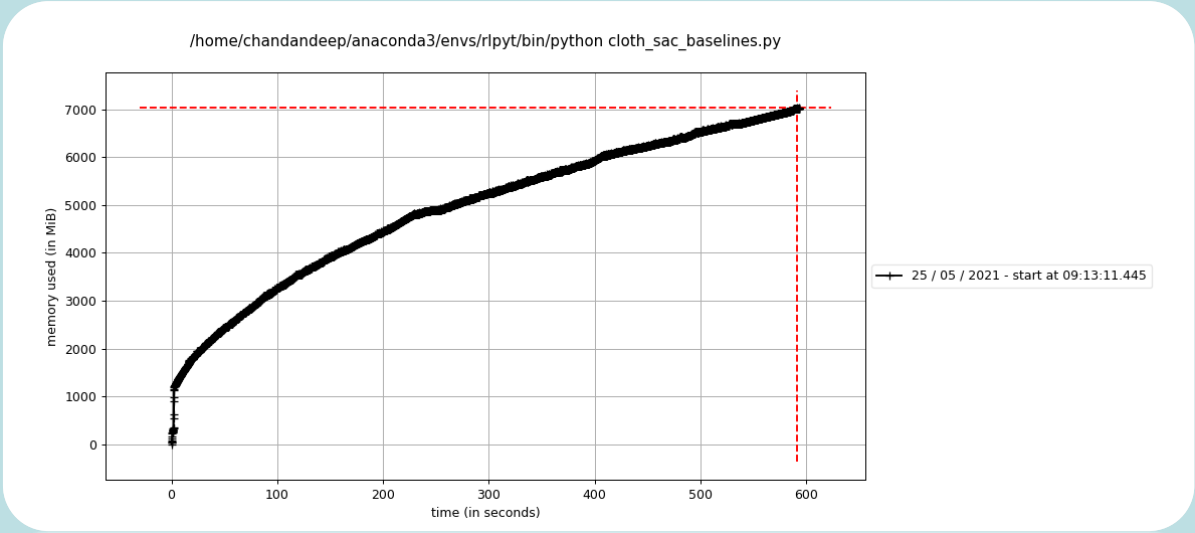
No. of steps (batch_size)

Weekly Review

25/05/21

Stable baselines implementation

- Convert DMControlSuite cloth_corner environment to OpenAI gym environment
- Memory gets saturated on running



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THANK YOU