

# DQN to play Space Invaders setup

## guidance

### Run with pre-trained model

- Please make sure below command is release in notebook file and configure the corresponding model file.(In this project we provided 4 pre-trained model files with 2k, 10k, 50k and 1m training steps)

```
dqn.load_weights('SavedWeights/1m/dqn_weights.h5f')
```

- Please also ensure below command is commented

```
dqn.fit(env, nb_steps=50000, visualize=False, verbose=2)
```

### Train from a pre-trained mode

- Please assign pre-trained model file name to variable "pre\_trained\_model". (In this project we provided 4 pre-trained model files with 2k, 10k, 100k and 1m training steps)
- And uncomment below command to ensure load this pre-trained model

```
dqn.load_weights(pre_trained_model)
```

- Please uncomment below command for training based on a pre-trained model

```
dqn.fit(env, nb_steps=50000, visualize=False, verbose=2)
```

## Notes

If you meet any model related error, please release code "del model" and run from there once again, it will solve the problem.

## Optional

You can set visualize=True when running testing command as below. When visualize=True the speed of testing will be slower than without visualization of the game.

```
scores = dqn.test(env, nb_episodes=100, visualize=True)
```