Computer Science Final Year Project

Weekly Progress Report

Week Number: 12

Date: 23rd October 2021

Student Reg No:	17B9082	Student Name:	Muhammad Syauqi Waiz bin Haji Sufri
Supervisor Name:	Dr Ajaz Ahmad Bhat		
Project Title:	An episodic memory approach to continual learning systems.		

This week's objectives and progress: (specify experiments' methodology, aim, objectives and results obtained if any)

1. Learn and understand EMN codes

For this week, I was able to fix last weeks problem, however, I am not sure about the accuracy.

Using –train:

```
PS D:\User\Sem Aug 2021\SS-4290\PyTorch> py cli.py --train
#! preparing data...
#! instantiating model...
#! training...
#! testing...
#! average error:  80.8
PS D:\User\Sem Aug 2021\SS-4290\PyTorch>
```

Using Bag-of-Words:

```
PS D:\User\Sem Aug 2021\SS-4290\PyTorch> py cli.py --use_bow
#! preparing data...
#! instantiating model...
#! testing...
#! average error:  81.9
PS D:\User\Sem Aug 2021\SS-4290\PyTorch>
```

Using linear start:

```
PS D:\User\Sem Aug 2021\SS-4290\PyTorch> py cli.py --use_ls
#! preparing data...
#! instantiating model...
#! testing...
#! average error: 100.0
PS D:\User\Sem Aug 2021\SS-4290\PyTorch>
```

Using tenk [10k datasets]:

```
PS D:\User\Sem Aug 2021\SS-4290\PyTorch> py cli.py --tenk
#! preparing data...
#! instantiating model...
#! testing...
#! average error: 100.0
PS D:\User\Sem Aug 2021\SS-4290\PyTorch>
```

Using joint training:

```
PS D:\User\Sem Aug 2021\SS-4290\PyTorch> py cli.py --joint
#! preparing data...
#! instantiating model...
#! testing...
#! average error: 100.0
PS D:\User\Sem Aug 2021\SS-4290\PyTorch>
```

The average error is high. I would like your opinion on these results.

End

Overall Progress: (summaries any findings; any achievements, challenges, difficulties encountered)

Findings/Achievements:
1. Able to understand episodic memory.
2. Able to understand memory networks.
3. Able to understand EMN approach to memory-augmented networks.
4. Able to understand MEMO approach to memory-augmented networks.
5. Learn basic of PyTorch
6. Understand the implementation of EMN.
7. Able to implement EMN to solve BABI tasks

Challenges/Difficulties:
1. Transform my understanding into codes.
2. Coding in general as I may take time to learn how to do perform certain things.

Next week's objectives:

To be decided every weekly meetings.

Date:	22/10/21	Student's Signature:	*SYAUQI*
Supervisor's Comments:-			
Date:		Supervisor's Signature:	