MCI Project Weekly Time Sheet

Team HA1 **Student ID** Manhong Chen a1904387 **Week starting:** 5-May

Day	Date	Time In	Time Out	Total hours	Task	How does it fit ito project plan?	Outcome/Next action
Monday	5/5	12:00 PM	3:00 PM	3.0	write the milestone 1 report	review the outputs between the expected and the actual	milestone 1 report version 1
Tuesday	5/6	12:00 PM	5:00 PM	5.0	do the research about KNN-CF models	finding new models that fit the project	next action: install and implement the model
Wednesday	5/7	12:00 PM	5:00 PM	5.0	install and implement the KNN-CF models by using easy dataset	use a new model for training to get a better outcome	finish inital training
Thursday	5/8	3:00 PM	5:00 PM	2.0	1. project meeting to discuss what we have done and the milestone 1 report 2. modify the miletone 1 report based on our supervisor's suggestions	Synchronize project progress with supervisor and show our model's outcome	complete milestone 1 report
Friday	5/9	1:00 PM	6:00 PM	5.0	use the project dataset to train the KNN-CF model	train the model and identify the parameters and outputs	have an outcome of our project dataset by training KNN-CF
Saturday	5/10	12:00 PM	5:00 PM	5.0	modify the code to train the KNN-CF	to get a better output for KNN-CF	have an outcome of our project dataset by training KNN-CF
Sunday	5/11	12:00 PM	3:00 PM	3.0	1. finish week 8 timesheet 2. learn about the requirements of testing plan	1. review what I have done for week 8 2. prepare for the testing plan	complete week 8 timesheet
			Total	28.0			

MCI Project Weekly Time Sheet

Team HA1 **Student ID** **Zihan Luo a1916700** **Week starting:** 5-May

Day	Date	Time In	Time Out	Total hours	Task	How does it fit ito project plan?	Outcome/Next action
Monday	5/5	1:00 PM	5:00 PM	4.0	1. Build the Two-Tower model structure 2. Define the Embedding tower structure	Complete the main construction of the model to lay a solid foundation for subsequent training	The model structure is completed and ready for training
Tuesday	5/6	2:00 PM	5:00 PM	5.0	1. Implement the Triplet Loss logic and 2.Debug the input and output forms of the model	Achieve the goal of similarity optimization and enhance the matching performance	The model was successfully trained and the embedding vector was output
Wednesday	5/7	1:30 PM	5:30 PM	4.0	Write and run the evaluation script to calculate evaluation indicators	The model effect was verified and it was found that the accuracy rate has increased to over 90%	1. The evaluation indicators demonstrate excellent performance, 2. The model training stage comes to an end
Thursday	5/8	2:00 PM	6:30 PM	4.5	Implement "recommend", and output the Top-3 recommendation results based on user input	Provide model reasoning capabilities to prepare for the system's launch	1. The recommendation results are reasonable and stable 2. Support input from different users
Friday	5/9	10:00 AM	6:30 PM	8.5	Add permutation importance analysis, plotting, training data output, bug fixing and result interpretation	The model's interpretability has been enhanced, and the output training data is used for subsequent comparison	Complete all training & evaluation modules and output image results and visual charts
			Total	26.0			

MCI Project Weekly Time Sheet

Team HA1 **Student ID** Ziyan Zhao a1883303 **Week starting:** 5-May

Day	Date	Time In	Time Out	Total hours	Task	How does it fit ito project plan?	Outcome/Next action
Monday	5/5	1:00 PM	5:00 PM	4.0	1. Clearly define the recommendation goal: recommend agents based on user input attributes 2. View all fields and analyze types (numeric/category/text) 3. Design scoring rules for each field and design field weight table	Clarify the recommendation logic from "user input" to "agent similarity"	1. Field weight table 2. Score function for each field
Tuesday	5/6	12:00 PM	6:00 PM	6.0	1. Implement the agent score function: input a piece of user data and output the score of each agent 2. Set the threshold (total weight exceeds 0.6) to connect the edge 3. Build edge_index (user_id, agent_id)	Establish the core logic of the training graph structure, whether the subsequent GCN can be trained correctly depends on this	1. Complete scoring function 2. Edge_index list generation code
Wednesday	5/7	12:00 PM	6:00 PM	6.0	1. Assign a unique user_id to each "user input" (from num_agents onwards) 2. Generate edge_index (2 x N Tensor) required by PyG 3. Check if all ids are correctly encoded and non-duplicate 4. Save the number of agents and users for model initialization	Successfully created a training graph structure that can be used by LightGCN	User-Agency Graph Data (edge_index)
Thursday	5/8	9:00 AM	3:00 PM	6.0	1. Build a LightGCN model instance 2. Send edge_index to forward to verify whether it works properly 3. Print user embedding observation dimension and visualization 4. Modify various parameters to adjust the model	Check whether LightGCN is seamlessly connected to the graph data to avoid invalid output after training	1. LightGCN can run smoothly 2. User embedding (for subsequent recommendation)
Friday	5/9						
Saturday	5/10	1:00 PM	3:00 PM	2.0	After the group meeting and training results, we found that LightGCN is not suitable for this project. Find a better-fitting model	The content-based recommendation system is more suitable for this project	Found the right model
Sunday	5/11	1:00 PM	3:00 PM	2.0	Build the environment	Makes the model run smoothly	The environment bulild successfully
			Total	26.0			

MCI Project Weekly Time Sheet

Team HA1 **Student ID** Jianghao Jin a1880849 **Week starting:** 5-May

Day	Date	Time In	Time Out	Total hours	Task	How does it fit ito project plan?	Outcome/Next action
Monday	5/5						
Tuesday	5/6	1:00 PM	2:00 PM	1.0	Write this week agenda	Record the progress and related issues before this week's meeting: milestone report and evluation of models	finish week agenda
Wednesday	5/7	2:00 PM	8:00 PM	6.0	Improve the dataset to make it applicable to the KNN model	Adjust the format of the dataset to adapt it to the KNN model, then conduct training tests and record the data	continue training and testing
Thursday	5/8	3:00 PM	4:00 PM	1.0	Group meeting	Share this week's outcome	Plan the next group allocation work
Friday	5/9	2:00 PM	10:00 PM	8.0	research the KNN model and train it	Test the performance of the model and integrate the input for this model	complete the model training
Saturday	5/10	2:00 PM	3:00 PM	1.0	write this week's meeting minutes	Record the content of this meeting: The progress of the model	finish meeting minutes
Sunday	5/11	2:00 PM	10:00 PM	8.0	Continue to debug the training results of the KNN model	Adjust the training results of KNN and ensure that its rating value is above 90	complete the model
			Total	25.0			

MCI Project Weekly Time Sheet

Team	HA1	Student ID	Jianing Dang a1882117			Week starting:	5-May
Day	**Date**	**Time In**	**Time Out**	**Total hours**	**Task**	**How does it fit ito project plan?**	**Outcome/Next action**
Monday	5/5	11:00 AM	4:00 PM	5.0	Uploaded NCF model code to GitHub, reduced file size due to exceeding limits, successfully uploaded after optimization, and modified the training dataset.	Uploading code to GitHub is a critical step for project collaboration and version control. Code optimization and training dataset modification are necessary tasks for improving model performance.	Successfully uploaded the optimized NCF model code to GitHub repository, reducing file size by approximately 40% while maintaining core functionality.
Tuesday	5/6	11:00 AM	4:00 PM	5.0	Continued refining training dataset modifications, adjusted script code to handle large-scale data transformation scenarios.	Script optimization and enhanced data processing capabilities directly support the project's requirements for large-scale data preprocessing, forming the foundation for ensuring model training quality	Successfully adjusted the script, improving data processing efficiency, effectively handling large-scale data conversion requirements. The script can now process multiple batches of data without memory overflow.
Wednesday	5/7	11:00 AM	4:00 PM	5.0	Rearranged the training dataset into triplet format, adjusted script parameters to allocate data between training and test sets.	The triplet reorganization of data and the training/test set division are key preparatory work for implementing recommendation models.	Completed triplet conversion for the entire dataset. Data format verification confirms it meets model input requirements. The next step is to begin the NCF model training process using the prepared dataset.
Thursday	5/8	11:00 AM	4:00 PM	5.0	Trained the NCF model with the modified dataset, initial results were not satisfactory, adjusted model parameters.	Model training and parameter adjustment are core tasks in the project implementation phase. This process aligns with the iterative optimization strategy in the project plan.	Completed the initial training of the NCF model, but the model accuracy is below the expected target. Attempts to adjust learning rate and batch size had limited effect. The next step is to deeply analyze the model structure, adjust the number of neural network layers and activation functions, while beginning DNN model training for comparison.
Friday	5/9	11:00 AM	4:00 PM	5.0	Continued adjusting NCF model parameters while simultaneously training the DNN model.	Parallel training of different models and parameter optimization are key tasks in the model comparison phase of the project plan.	After adjusting the NCF model parameters, accuracy is still with room for improvement. Initial training results of the DNN model performs slightly better. Next week, we will continue to optimize both models.
Saturday	5/10						
Sunday	5/11						
			Total	25.0			