AMAN: Agent for Mentoring and Assisting Newbies in MMORPG

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Abstract

In online games with diverse contents and frequent updates, newcomers first learn gameplay mechanics by community intelligence but soon face challenges that require real-time guidance from senior gamers. To provide easy access to such support, we introduce AMAN, Agent for Mentoring and Assisting Newbies in MMORPG (Massively Multiplayer Online Role-Playing Game) - a companion chatbot designed to engage novice gamers. Our model functions as a human-like chat buddy that interacts with users in a friendly manner while providing substantive informational depth. In this light, we propose a multi-stage learning approach that incorporates continual pre-training with a sequence of online resources and instruction tuning on curated dialogues. To align with gamers' specific needs, we first analyze useroriented topics from online communities regarding a widely played MMORPG and construct a domain-specific dataset. Furthermore, we develop a multi-turn dialogue data to foster dynamic conversations with users. The evaluation result with the model trained upon publicly available language model shows our practical applicability on how conversational assistant in online games can help novice gamers.

1 Introduction

MMORPG refers to Massively Multiplayer Online Role-Playing Games and their social communities (Jon, 2010). Players develop their avatars by completing quests, earning experience points, and enhancing abilities and items (Sourmelis et al., 2017). These elements help the player progress to higher levels of the game, even as the process becomes increasingly repetitive and challenging (Achterbosch et al., 2008). However, MMORPG often presents high barriers to entry due to the complexity of ingame elements and specialized terms. New players, around knowledge sharing and social networking (Hsiao and Chiou, 2012; Junghoon Moon and Jo, 2013). Interactions within games are significant motivating factors (Ducheneaut et al., 2006; Alsén et al., 2016), driving engagement and retention through the impact of player connections on the overall gaming experience (El-Nasr et al., 2016). In the communities, senior gamers offer expert advice and learning opportunities to help novices (Gandolfi et al., 2023). However, the vast amount of information and the use of gamer slang words can make it difficult for newcomers to fully participate. Gamer slang encompasses varying levels of linguistic knowledge and expertise (Ensslin, 2011).

or "newbies," frequently struggle with understand-

MMORPG players create communities centered

ing the gameplay mechanics.

In response to these challenges and to support novices, we propose a user-friendly chatbot that can simplify complex gameplay mechanics and terminology. Chatbots, interactive agents that offer immediate responses to users (Smutny and Schreiberova, 2020), have demonstrated efficacy in breaking down complex concepts and enhancing user engagement. Users favor the human-like and friendly chatbot over the mechanical, taskfocused one (Islind et al., 2023). Applying this to MMORPG, our chatbot provides clear, fun explanations to help new players, reducing the knowledge gap and preparing them for in-game cooperation.

State-of-the-art model benchmarks show that large language models (LLMs) are effective in various tasks. Besides, when further trained on domainspecific datasets, they significantly enhance their performance within that particular domain (Wu et al., 2023c,a). This capability makes custom LLMs ideal for applications like assistant chatbots in gaming industry. LLMs have been applied in the gaming in various roles (Gallotta et al., 2024). They can act as in-game players (Toshniwal et al., 2022; Ciolino et al., 2020), serve as non-player characters

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(NPCs), and function as game masters (GM) directing the game's flow (Triyason, 2023a; Zhu et al., 2023b). While we recognize player assistance as a crucial role for LLMs, existing research has mostly focused on other aspects (Gallotta et al., 2024).

Our paper presents a novel approach for developing a game-specific multi-turn chatbot that supports novice gamers, reflecting real-life conversation. The conversational capabilities of LLMs are well-suited for providing hints and walkthroughs in game strategies. Our chatbot engages in friendly conversations and provides gameplay tips. Using a custom game-specific dataset built on a well-known MMORPG 'Lost Ark Online' and a multi-stage learning approach, our chatbot AMAN (Agent for Mentoring and Assisting Newbies) aims to enhance the gaming experience for newcomers by offering relevant support in a specific persona style.

2 Related Works

2.1 LLMs in Game Domain

The emergence of LLMs, which demonstrate nearhuman intelligence based on extensive prior knowledge, has opened up new possibilities for the integration across diverse domains. In gaming, LLMs have primarily emerged in two application areas: as game player agents and as supportive tools in as in-game supportive tools.

In the first scenario, LLMs serve as in-game player agents, displaying their abilities in games such as Chess and StarCraft (Toshniwal et al., 2022; Ciolino et al., 2020; Ma et al., 2023). Additionally, LLMs have been used to evaluate each other in text-based games like 20 Questions or Wordle, providing a controlled environment for benchmarking their capabilities (Chalamalasetti et al., 2023).

In the second role, LLMs are adopted to generate dialogue for NPCs, exploring dimensions like context-aware conversations (Paduraru et al., 2023) and story-focused dialogues (Taveekitworachai et al., 2023). Studies showed that LLM-generated dialogue and quests can enhance player experience (Paduraru et al., 2023), indicating potential to improve user engagement and narrative quality (Paduraru et al., 2023). LLMs can also serve as Game Masters to craft in-game plots and enhance gameplay in games such as Dungeons & Dragons (Zhu et al., 2023a; Triyason, 2023b).

2.2 Domain Adaptation

Research in language models consistently shows that domain-adaptive pre-training significantly improves natural language understanding capabilities. (Gururangan et al., 2020; Cheng et al., 2022).

Two main approaches for pre-training domainspecific language models are building from scratch and using continual pre-training. SciBERT (Beltagy et al., 2019), an encoder-only model tailored for scientific literature, exemplifies the fromscratch approach. Models such as BloombergGPT (Wu et al., 2023b), designed for finance, have adopted decoder-only architectures, building on this approach. On the other hand, models like BioBERT (Lee et al., 2020) and Pmc-llama (Wu et al., 2023a), Tailored for the medical domain, continual training demonstrates advantages by gradually refining models to enhance their performance on domain-specific tasks. Based on a prior work demonstrating that continual pre-training achieves competitive results with less data and fewer resources than training from scratch (Xie et al., 2023), we adopt this approach in our study.

3 Methodology

In our research, we aim to create a sense of familiarity for users, as if they were conversing with someone with extensive gaming experience. To achieve this, we develop the system by integrating not only knowledge and information that assist in gaming but also multi-turn conversation data.

We propose a multi-stage learning approach to develop an effective conversational assistant for playing MMORPG, focusing on both knowledge acquisition and interactive capabilities. Our approach is inspired by usual journey of the novice gamers of MMORPG. Newcomers that just completed the tutorial would primarily be informed by community intelligence or in-game NPCs (Stage 0). However, as they become senior and their expertise grows (Stage 1), the challenges they face become more complex and tricky. In this circumstances, real-time conversation with other senior gamers would greatly help the player achieve the desired goal (Stage 2). Our multi-stage learning process is outlined as follows:

3.1 Stage 0: Continual Pre-Training

The initial stage is the warm-up phase, during which the model undergoes continual learning using game domain corpora to incorporate game-



Figure 1: The proposed multi-stage learning approach includes: Stage 0: Continual Pre-Training, Stage 1: Depth Up-Scaling, Stage 2: Game-Specific Instruction Tuning. This process develops a "game buddy bot" capable of engaging in game-related conversation like a friend. It provides both in-depth knowledge and interactive support to newbies, enhancing their overall gaming experience.

specific knowledge that the pre-trained LM has not encountered before. Before instruction-tuning, domain-adaptive pre-training is conducted to enable the model to learn complementary representations of the game domain. This process reflects how newcomers initially acquire game knowledge through online resources, encompassing an understanding of the game's lore, mechanics, character backgrounds, and strategic elements.

We train an LM on domain-related texts using two kinds of templates, as outlined in Figure 1. The first type guides the model to understand the relationships between game entities and concepts within specific game subdomains by providing structured content, including instruction, document title, and content. The second type, designed for the single-turn question answering (QA) format used in the next instruction tuning stage, equips the model with the ability to answer game-related questions accurately.

3.2 Stage 1: Depth Up-Scaling

In the intermediate stage, we scale up the model parameter size following the approach applied in Kim et al. (2023). Similar to how gamers progressively expand their foundational game knowledge, we replicate the model of Stage 0 and extend it by duplicating selected layers.

3.3 Stage 2: Game-Specific Instruction Tuning

The final training stage reflects the shift in how players learn the game as their proficiency grows. To mirror this, we employ instruction tuning on a combined dataset of single-turn and multi-turn dialogues. As players gain experience, their questions become more specific. Single-turn QA data enables the model to answer specific queries about the game. This includes topics like patch notes, class skills, equipment details, and dungeon guides.

Also, experienced players often engage in deeper conversations with others. Multi-turn conversations allows the model to engage in context-aware interactions. This data, consisting of transcripts from real player conversations, helps the model understand the flow of conversation, and be exposed to how players might ask questions in different ways.

4 Dataset

For concrete implementation of our method, we chose a widely played MMORPG 'Lost Ark Online' serviced by Smilegate which holds 1.2M global users. Though the game is serviced all around the world, here we target Korean gamer communities where the discussion on the gaming strategies and patch updates is active.

Торіс	Continual pre-train		
 Topic 0: Raids & Gear Progression Keywords: Abyss dungeon, Gear, Raids, Valton gate, TriPod, Commanders, Quest, Argos, Chaos dungeon 	the dataset for each 1. For Stage 0, we		
Topic 1: In-Game System	total, containing 8.7		
Keywords: Engravings, (Ancient) Accessories, Setting, Jewelries, Combat engravings, Avatar	articles about Lost and Story sections		
 Topic 2: Character Selection & Development Keywords: Class, vs., Main / Alternate character, Recommend, Barracks, Preferable, Growing 	community. This s strategic content and		
 Topic 3: Beginner's Tips & Strategies Keywords: Jumping Ticket, Newbie, Mokoko, Card, Event, Story, Super mokoko express 	community. Also, w removed profanity		
	spection of Korean		

Figure 2: LDA topic modeling results

4.1 User Analysis

We conducted user analysis to explore the topics that gamers mostly inquire about while playing. We collected about 40K posts from QA section of the game community website¹ between January 20, 2022, and April 9, 2024. These posts were processed by combining titles and questions into single sentences, removing stopwords, and then vectorizing them based on frequency using the top 1,000 most frequent words. We applied topic modeling (Jelodar et al., 2019) to these vectorized representations. The result is presented in Figure 2. Users show interest in topics related to Raids and Gear Progression (e.g., Abyss dungeon, Quest), In-Game Systems (e.g., Engravings), Character Selection and Development (e.g., Main/Alternate characters), and Beginner's Tips and Strategies (e.g., Jumping Ticket, Newbie). When constructing the instruction set, we focused on the topics identified through topic modeling, particularly those that users showed significant interest in.

Stage	Data Type	Domain	Statistics	Number
Stage 0	Raw Document		Total # Sentences	52,395
Stage 0	Kaw Document	-	# Tokens	8.7M
Stage 2		Story	Total #	237
	Single-Turn QA	Class (subclass, skill, engraving)	Total #	445
		Balance Patch Update	Total #	1,561
		Dungeons & Raids guide	Total #	766
		Set Effect of Equipment	Total #	284
			Total # Dialogues	61
		Game-Specific Knowledge	Avg. # Turns per Dialogue	21.67
	Multi-Turn		Total # Turns	1322
	Dialogues		Total # Dialogues	950
		Chit-chat	Avg. # Turns per Dialogue	20
			Total # Turns	19,003

4.2 Dataset Collection

Table 1: Data statistics for raw document (CPT), singleturn QA (Type 1), and multi-turn dialogue (Type 2) **Continual pre-training** The detailed statistics of the dataset for each stage are summarized in Table 1. For Stage 0, we collected 52,395 sentences in total, containing 8.7M tokens, using Korean wiki articles about Lost Ark and posts from the Q&A² and Story sections in the aforementioned gaming community. This stage emphasizes the width of strategic content and discussions within the gaming community. Also, we filtered out noisy posts and removed profanity from the text with manual inspection of Korean L1 speakers, to prevent further harm that can be caused by the model output.

Game-specific instruction tuning In Stage 2, we put further effort into collecting the data for specific knowledge and context-aware interactions. Type 1 (single-turn QA) dataset consists of two parts. Firstly, we handcrafted 428 single-turn QA pairs under various categories. Two gamers who are well-versed in Lost Ark, having played for over three years, organized documents summarizing essential in-game information covering categories such as story, class, gear, etc. Based on these documents and the dungeon guide from Stage 0, we manually developed a set of questions and answers, which were informational and objective, designed with no open-ended responses. We expanded this QA set to 1,503 pairs using Korean-specific query augmentation to ensure robust model performance across various question endings. To compensate for the simplicity of the created QA pairs, we additionally synthesized questions using GPT-4 API³ using relevant wiki paragraphs as answers. The resulting 1,392 draft questions were also inspected by human game experts. In total, we obtained 3,293 single-turn QA pairs.

For Type 2 (multi-turn dialogue) dataset, we built an in-house collection pipeline to reflect the conversation of players. First, we asked for the same human participants to create dialogues on topics such as basic game information, character classes, user culture, dungeons & raids, and leveling methods, in a self-play manner, all while maintaining the friendly persona. Detailed guidelines are outlined in Appendix A. Nextly, we constructed chit-chat data to enhance the chatbot's persona consistency and improve its daily conversation capabilities.

¹https://www.inven.co.kr/board/lostark/4822

 $^{^{2}}$ Overlaps with the QA posts in Section 4.1.

³https://chatgpt.com/

4.3 Dataset Composition

The hierarchical taxonomy of the game is illustrated in the Figure 3. Lost Ark features a highly complex data structure where characters are developed based on the epic story, each possessing unique skills and engravings. Players participate in raids to level up items and use runes and jewelries to enhance their skills. We categorize the single-turn QA set based on these game's features.

Story Lost Ark encompasses the story and background of Arkrasia, the in-game world, exploring past events in-depth to provide gamers with an understanding of the gameplay background. We utilize a worldview composed of five main parts.

Leveling Guide In Lost Ark, both gear level and growth level are crucial for character development and progression. Gear level impacts a character's strength and enables access to higher-level content such as advanced dungeons and raids. Growth level enhances skills and stats, improving combat efficiency and unlocking new game features. To facilitate understanding of these concepts for model training, we have created a QA dataset.

Class Lost Ark offers 6 main class archetypes that divide into many advanced sub-classes, each with its own unique skills. Class engravings, which provide various effects and bonuses, enhance the gameplay experience for each class. We craft QA sets that cover the main classes, their sub-classes, and their skills and engravings.

Dungeon & Raid Lost Ark centers on legion raids, which are endgame content, where players enhance their items through refinement to increase their item levels and advance their progress. We transform dungeon guides gathered from the gaming community into a QA format.

Balance Patch Update Game updates with new content are crucial in online gaming, enhancing player engagement and retention (Hyeong et al., 2020). Staying updated with patch notes helps players adapt to game evolution. When constructing a single-turn QA set, we compile balance patch updates by date and class from the official website.

5 Experimental Setup

5.1 Model and Training

For training and evaluation, we adopted the model derived from LLaMA2 (Touvron et al., 2023). We trained the Korean version of LLaMA2 (L. Junbum,



Figure 3: Hierarchical taxonomy of Lost Ark

2023) for Stage 0 and Stage 2, with the original model depth up-scaled from parameter 7B to 10B in Stage 1, with the duplication of 8 layers. The model was trained for 3 epochs with a batch size of 64. We utilized AdamW (Loshchilov and Hutter, 2017) as our optimizer, incorporating cosine learning rate scheduling and weight decay.

5.2 Evaluation

To evaluate our models, we have created a test dataset specifically curated for open-domain QA within the MMORPG domain. This test set was build by aforementioned gamers of Lost Ark. They have crafted questions that a real user might be curious about, covering topics such as leveling, class, story, and raid. For single-turn questions, the set contains 20 instances. For multi-turn questions designed to assess context understanding, two additional sentences were added to each single-turn question, resulting in a total of 60 instances. Utilizing this set, we systematically conduct comparative analyses of our models using diverse methods. The prompt used during evaluation for inference can be found in Appendix B.

Human Evaluation We adopted three human evaluation criteria to measure the quality of the generated responses: (1) fidelity in reflecting **knowledge**, assessed on a binary scale (0 or 1) (2) adherence to a friendly conversational **style** (0 to 2 scale), and (3) **fluency** and appropriateness of the response in relation to the context (0 to 2 scale)

Automatic Evaluation To compare the model performance in replicable manner and relate them with human evaluation, we additionally compute the BERTScore (Zhang* et al., 2020), which measures F1 scores by matching token embeddings between the human reference and chatbot response. Besides, to further evaluate the conversational style, we trained a style classifier and measured its average probability of predicting a target style (StyleProb). Detailed training method of style classifier is in Appendix C.

6 Results & Analysis

Methods	Catagory	Human Evaluation			Automatic Evaluation	
wiethous	Category	Knowledge	Style	Fluency	BERTScore	StyleProb
Stage 0	Class	0.417	0.028	0.815	0.668	0.234
	Leveling	0.614	0.162	0.654	0.661	0.375
	Raid	0.533	0.222	0.744	0.651	0.324
	Story	0.237	0.921	-	0.689	0.129
	Mean	0.450	0.333	0.738	0.667	0.266
	Class	0.722	1.204	1.713	0.726	0.470
	Leveling	0.727	1.055	1.578	0.699	0.508
Stage 2-1	Raid	0.533	1.156	1.8	0.720	0.288
	Story	0.526	0.237	-	0.714	0.072
	Mean	0.627	0.913	1.697	0.715	0.335
Stage 2-2	Class	0.725	1.298	1.442	0.685	0.772
	Leveling	0.523	1.432	1.515	0.688	0.863
	Raid	0.6	1.422	1.6	0.7	0.781
	Story	0.553	1.605	-	0.714	0.183
	Mean	0.6	1.439	1.519	0.697	0.64

Table 2: Test set results: Reflection of Knowledge, Contextual Fluency, and Friendly Style. Scores are based on: (1) fidelity in reflecting knowledge (0 or 1 scale), (2) adherence to a friendly conversational style (0 to 2 scale), and (3) fluency and appropriateness in context (0 to 2 scale). In the table, Stage 2-2 is our final proposed methodology, AMAN.

The Cohen Kappa scores (Cohen, 1960) between the two raters are as follows: 0.318 for Knowledge, 0.4622 for Style, and 0.1586 for Fluency. Knowledge scores remained stable through the stages after continued pre-training, with some categories (Class, Story) even showing improvement. In the Class category, a significant improvement was shown in Knowledge scores across stages, likely due to the category's nature being closer to closed QA than open-ended QA. The Knowledge Cohen Kappa score for the Class category is 0.4696, indicating a reasonable level of agreement between evaluators for numerous complex categories like job classses. As progression advances from Stage 0 to Stage 2, Fluency scores increase. This conveys that training the model with multi-turn conversations can help it better reflect context and improve dialogue fluency. Besides, Style scores significantly rise from Stage 0 to Stage 2-1 and then to Stage 2-2, which means that adding chit-chat

dataset results in more friendly and conversational responses. However, Style scores were generally lower in the story category due to its tendency for longer, narrative responses. The experimental results show that both contextual understanding and stylistic representation improve in the latter stages.



Figure 4: Example of a multi-turn conversation from the test set, showing the responses generated by each stage for given context.

Figure 4 displays the real conversation history of the test set across various stages. In response to the user's first question, Stage 0 model provides a detailed answer but it is excessively long and includes irrelevant content. In contrast, Stage 2-1 and Stage 2-2 models address the core aspect of the query and answer it accurately, and in particular, the latter, which has the highest Style score, responds as if it were an actual mate that the user encounters while playing Lost Ark. In the following question, Stage 0 model focuses on the term 'item level' and fails to understand the context. However, Stage 2 models provide accurate answer while maintaining a friendly tone, which guarantees the experience that the user might get from human mates in his/her onboarding and growth.

7 Conclusion

We introduce chatbot 'AMAN' for newbie gamers and its building methodology. Our experimental results show that the model developed with this method successfully balances friendliness and accuracy. Our study demonstrates the potential for LLM to effectively serve the gaming community by covering multiple in-game topics, particularly in reducing the challenges faced by newer players.

Broader Impact

'AMAN' improves the user experience by providing real-time support and personalized guidance in complicated online gaming environments, where newbies often face a steep learning curve. Unlike traditional tutorial systems, 'AMAN' mimics human-like mentoring, dynamically responding to users' specific needs. It addresses areas that new users often struggle with, such as character development, raid culture, and system. This helps players avoid the isolation that is common during the early stages of gameplay and prepares them to actively participate in raid content that requires a multiparty cooperation.

Limitations

Though this study was conducted specifically for the MMORPG genre, it is likely to be suitable for most game genres that require question and answer interactions. However, we note that our experiment was conducted only with a single MMORPG 'Lost Ark' which holds significant amount of users worldwide, that our methodology may not be necessarily effective for independent or small-scaled games, and games in other genres as well.

Besides, despite our efforts to capture comprehensive game knowledge, our current approach faces limitations in terms of data storage capacity. Incorporating retrieval-augmented generation (RAG) into our framework would significantly enhance the promptness and accuracy of our model's responses, owing to its ability to retrieve and integrate relevant information from external sources.

Ethical Considerations

We ensure ethical compliance through careful dataset curation and model design. Profanity terms were manually filtered to remove content containing discrimination or hatred against any race, gender, region, or age. Participants involved in dataset creation provided informed consent, and steps were taken to mitigate bias and promote inclusivity in model responses. If any biased or harmful data is identified post-deployment, immediate corrective actions will be taken to remove it.

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Appendices

A Guidelines for Participants

The dataset for Stage 2 was compiled with the participation of gamers who have over three years of experience and had logged in at least once within the two weeks preceding the data collection period. Participants created a multi-turn dataset based on key gaming categories, such as basic game information, story, leveling methods, classes, user culture, and raids. The dataset was constructed according to the following guidelines.

- Choose a subdomain within a larger theme to compose the dialogue.
- Each conversation includes an average of more than 20 turns.

- Maintain natural and everyday conversation, but ensure it contains meaningful game knowledge.
- The character should be friendly and approachable, like a friend.
- Do not include violent or explicit content.
- Do not use profanity.
- Allow the use of slang and abbreviations that appear in games.
- At the end of each dialogue session on a specific topic, an administrator reviews it.

B Prompt Templates used for Inference during evaluation

System prompt: "A user discusses various aspects of Lost Ark with an expert, covering topics such as raids, the story, character development, and classes. When explaining the story, the expert elaborates on the Lost Ark universe, highlighting key eras and events including the Dawning Age, Rule of Darkness, Eon of War, Epoch of Exploration, and Age of Innovation."

C Detailed Training Methodology of the Style Classifier

We trained the style classifier as a binary model: 0 represents data without distinctive character style, specifically using the formal bot responses from the OIG-small-chip2-ko dataset⁴ and 1 corresponds to the chit-chat dataset used in stage 2, as in the Table 1. Additionally, we incorporated 3,880 sentences from the AI-hub Korean text style conversion dataset⁵, categorizing them formal (0) or colloquial (1) based on style, with each category having 1,940 sentences. We employed the Korean comment ELECTRA (Clark et al., 2020; Lee, 2021). This model is pre-trained on NAVER news comments, which often contain typos and informal expressions not typical in formal datasets.

D Example of the Dataset

An example of the constructed dataset can be found in Table 3. Single-Turn QA addresses the knowledge specific to each category through a series

⁴https://huggingface.co/datasets/heegyu/ OIG-small-chip2-ko

⁵https://aihub.or.kr/aihubdata/data/view.do? dataSetSn=287

of questions and answers. Multi-turn conversations maintain context across several turns, with responses formulated to follow on from previous questions.

Single-Turn QA		
Category	Example	
Story	Q: I am curious about the story of The Dawning Age, the Birth of the World in Lost Ark.	
	A: In the beginning, a world existed where only chaos prevailed, and from it, order was born	
Class	Q: Tell me about the skills of the Warlord class.	
Class	A: Hook Chain, Rising Spear, Dash Upper Fire	
Leveling Guide	Q: What is the Tripod system?	
Levening Guide	A: The Tripod system is a skill enhancement system. You can raise the skill level by acquiring amulets	
Dungeon & Raid	Q: What is the reward of the Abyss Dungeon 'Ivory Tower of Chaos'?	
Dungeon & Kald	A: The primary reward is the 'Elixir of Wisdom and Energy of Wisdom'	
Balance Patch Update	Q: Can you tell me how the Sorceress class was updated in the May 8, 2024 update?	
	A: The effects of the 'Igniter and Reflux' engraving have been changed as follows	
	Multi-Turn Conversation	
Category	Example	
	Speaker A: Thinking about going to Argos today!! Is Argos a manageable raid~?	
Leveling Guide	Speaker B: It depends on your level! Are you around level 1460?	
Levening Guide	Speaker A: Yeah, about that.	
	Speaker B: Then no worries! If you know the essential mechanics, you can skip almost all of the damage	
Dungeon & Raid	Speaker A: I'm thinking of trying Valtan now, what kind of raid is Valtan?	
	Speaker B: Finally trying Valtan, huh?! Valtan is, um a raid to see if the player and Lost Ark really click!! Haha!	
	Speaker A: It's a test to see if the player and Lost Ark click?	
	Speaker B: Yep! Usually, if someone enjoys Valtan, they tend to enjoy the raids that come after	

Table 3: Example of our dataset of the Stage 2.