



Final Project Proposal

Sakka League

Client:
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Service Provider:
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Objective:

This project aims to train a machine translation (MT) engine using Microsoft Custom Translator to fully translate Final Fantasy IV from Japanese to English. Our training data set will include segments from other Final Fantasy games (VI, VII, VIII), our tuning data set will include segments from Final Fantasy XII and XV, and our testing data set will include segments from Final Fantasy IV. **This engine can be applied to future Final Fantasy games if proven successful.**

Time & Cost Goals:

The typical (human) translation timeline for video games is approximately 20 weeks. Our process to train and analyze the MT engine will take 14 weeks, coming out to at least a **30% increase in speed**. The overall speed and reduced human involvement will lead to at least a **50% cost reduction**.

Typical Game Translation (~20 Weeks)	Our Process (14 weeks)
Familiarization (1-3 weeks)	File Preparation & Alignment (6 weeks)
Localization (1-8 weeks)	MT Training (30 rounds, 3 weeks) • Includes 3 Rounds of Human Evaluation
Quality Assurance (5-8 weeks)	Editing & Quality Assurance (4 weeks)
Client Review and Approval (3-8 weeks)	Data Analysis (1 week)

<https://www.playstationlifestyle.net/2009/07/24/atlus-explains-video-game-localization/>

Timeline:



Deliverables:

- Complete translation of Final Fantasy IV and MT engine which can be used for future Final Fantasy translations
- Analysis of each round's metrics and data used in training as represented by BLEU scores
- QA log of changes made during training and Human Evaluation reports

Engine Recommendation: Microsoft Custom Translator

PEMT Recommendation: Use regex for finding Japanese punctuation in the target text; utilize paragraph segmentation

Human Evaluation:

Holistic Quality Metrics		Analytic Quality Metrics			
Correspondence	Is meaning accurately conveyed between the source text and the target text?	Style	Accuracy	Terminology	Fluency
Readability	Would a user be able to progress through the game and understand the story?	Register (Is speech appropriate for a given character?)	Addition Omission Mistranslation	Inaccurate general terminology Inaccurate game universe terminology Inconsistent terminology	Ambiguity Grammar Spelling
Faithfulness in Style	Does the game have the same mood and tone as other games in the series?	String length within parameters			

Unacceptable [≤ 8 points] = Start from scratch

Acceptable [≥ 9 points] = Move to analytic evaluation by post-editors

Correspondence, readability, and faithfulness in style will each be rated on a **0-5 point scale** by native-speaking evaluators familiar with the Final Fantasy series.

Unacceptable [≥ 81 points] = Start from scratch

Acceptable [≤ 80 points] = Successful quality evaluation

Analytic quality evaluation will be conducted by post-editors utilizing the above metrics and the following error levels:

Minor: 1 points; Major 5 points; Critical: 25 points

Project Costs:

Services	Estimated Time (Hour)	Rate (USD/Hour)	Cost (USD)
Source Language and Target Language Collection	10	40	400
Data Cleaning	20	40	800
File Preparation	40	40	1600
MT Training (6 Rounds; Preparation & Analysis)	10	40	400
Human Evaluation (2 Rounds; Quality Assurance)	10	50	500
Editing and Quality Assurance	10	35	350
Scheduled Meetings	35	40	1400
Total Project Cost			5,450