Localization documentation for ReflectEd project

1. Introduction

This document outlines the localization process for the instant feedback app, aiming to make the app accessible and user-friendly for diverse users. Localization is crucial for ensuring that students and teachers from different linguistic backgrounds can effectively use the app, enhancing the feedback collection process.

Scope:
The localization efforts focus on the user interface (UI), error messages, and backend messages to ensure comprehensive user interaction in multiple languages: **English, Finnish, Russian, and Vietnamese.** The user documentation remains in English.

2. Localization Infrastructure

The project utilizes **i18next**, an internationalization framework, to manage the localization process. Here's how it is implemented:

- **Dependencies Installation:** The dependencies, **i18next, react-i18next, and i18next-browser-languagedetector**, are installed to manage localization effectively.

```
npm install i18next react-i18next i18next-browser-languagedetector
```

- **Localization Configuration Creation:** The i18next configuration is set up with language detection and initial translation resources. Language detection is configured to automatically detect the user's language and provide appropriate translations.

```
import i18n from 'i18next';
import LanguageDetector from 'i18next-browser-languagedetector';
import { initReactI18next } from 'react-i18next';

i18n
  .use(LanguageDetector)
  .use(initReactI18next)
  .init({
    fallbackLng: 'en',
    resources: {
      en: { translation: { greeting: 'Hello' } },
      fr: { translation: { greeting: 'Bonjour' } },
    },
    interpolation: { escapeValue: false },
  });

export default i18n;
```

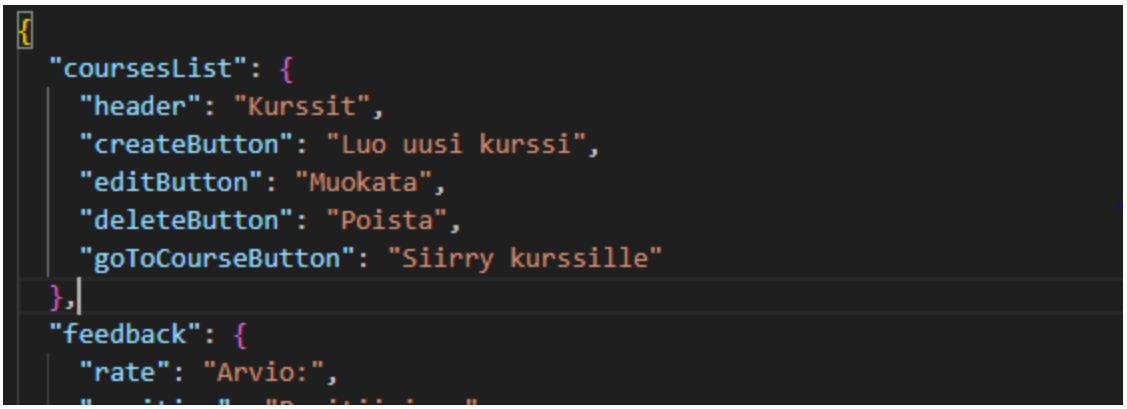
- **Implementation in React Components**: The **useTranslation hook** from **react-i18next** is utilized in React components to retrieve and display translations based on the user's active language.

```
import React from 'react';
import { useTranslation } from 'react-i18next';

function App() {
  const { t } = useTranslation();
  return <div><h1>{t('greeting')}</h1></div>;
}

export default App;
```

- **Backend Configuration**: Requests to the backend are configured to include the 'Accept-Language' header, ensuring that responses are localized based on the user's language settings.
- **Translations Organization:** Translations are stored in separate JSON files, organized by language for clarity and ease of management.



- **Dynamic Content Handling:** Dynamic content, such as dates, numbers, or user-specific data is integrated using placeholders within translation strings, which are replaced at runtime with actual values.

This setup ensures that the app is well-equipped to handle multiple languages, improving accessibility and user experience across different regions.

3. Workflow

Translation Process

The translation process for our project involves several structured steps to ensure accuracy and cultural appropriateness in translations:

- *Extraction*: Strings are extracted from the source code and stored in separate JSON files within the locale directory.
- *Initial Translation*: The extracted English texts are translated into Russian, Finnish, and Vietnamese using Google Translate to provide a basic translation foundation.
- *Proofreading*: Each language version is then proofread by native speakers
- *Verification:* We manually go through each file again to ensure that all strings, including error messages, are accurately extracted and translated.
- *Double Proofreading:* The translations undergo a second round of proofreading by different team members to guarantee translation quality and contextual accuracy.

Roles and Responsibilities

The roles and responsibilities in the localization process are defined to streamline operations and enhance accountability:

Localisation Manager (Anna): Oversees the entire localization process, ensures deadlines are met, and coordinates between team members and language experts.

Lead Translators:

Anna: Coordinates Finnish translations, including the engagement of additional Finnish language experts, proofreads Russian translations

Artur: Manages Russian translations, proofreads Finnish translations.

Pham: Supervises Vietnamese translations.

Arman: Conducts the initial proofreading for Russian translations.

4. Guidelines for Translators

For the ReflectEd project, the translation process is managed internally by our team members who are native speakers of the target languages. Below are concise guidelines tailored to our project needs:

Translation Process:

Initial Translation: Use Google Translate to get a rough translation of the English text into Russian, Finnish, and Vietnamese.

Manual Review: Each translation must be manually reviewed by team members who are native speakers, ensuring natural phrasing and correct grammar.

Double Check: All translations undergo a second review by another team member to guarantee accuracy and address any missed errors.

Best Practices:

Contextual Accuracy: Ensure that translations are contextually accurate. Consider the specific usage within the app and the typical expressions in the target language.

Dynamic Content: Handle placeholders carefully. Do not translate placeholders ({{value}}), as they are used for dynamic data insertion.

Cultural Sensitivity: Adjust content to be culturally appropriate and sensitive. Avoid translations that might be correct linguistically but inappropriate or offensive culturally.

Practical Tips:

Collaboration: Work closely with other team members, especially when clarity about context or terminology is required. After each change in the app that introduces new

strings, use Google Translate for a preliminary translation and then notify the responsible translator via WhatsApp or Trello to ensure the accuracy of the translation.

Consistency: Aim for consistency in terminology and style across the app. Even without a formal glossary, use commonly agreed-upon terms and phrases.

Feedback and Iteration: Encourage open feedback on translations and be prepared to iterate and improve them based on team input.