# A GUIDE TO CREATING LOCALISATION-FRIENDLY USER INTERFACES

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# 1 Introduction

This guide was created by a group of students studying for a master’s degree in Technical Communication and Localisation at the University of Strasbourg in France.

The aim of the guide is to assist IT developers and designers in creating user interfaces (UIs) that are optimised for localisation. It addresses software interfaces in general rather than for a specific genre such as gaming.

Localisation specialists are faced with many challenges when translating or preparing UIs for localisation. UI strings that are ambiguous, inconsistent or lacking context may result in poorly localised software. This can compromise user experience and result in a UI that is messy and difficult to use. We believe that such challenges can be overcome by providing IT developers and designers with a clear set of instructions to generate localisation-friendly UI text or copy.

UI texts that are optimised for localisation will also positively impact the overall quality and efficiency of the software and make it more user-friendly, as well as reduce the number of support tickets. Comprehensible UI texts also form the basis of good documentation and its translation.

As part of the research for this guide, localisation professionals were invited to participate in a survey. Their experiences in localising UIs, including issues that they face, together with their recommendations to overcome these issues have been instrumental in creating the content for this guide.

We hope that you find this guide useful in your work as a UI developer or designer.

# 2 Language and Grammar

## 2.1 Unambiguity

It is much easier for language specialists to localise a product when the UI text is clear and simple. If texts are ambiguous (because prepositions are missing, for example), this will lead to more questions from translators and can even cause mistranslations.

- Avoid synonyms and homonyms.
- Explain any abbreviations.
- Avoid jargon or technical terms if it is not appropriate for the target audience.

Not all IT terms are understood by everyone. Replace them with alternatives that are more commonly used. For example:

| | |
|---|---|
| **INSTEAD OF** | Set the Express flag. |
| **USE** | Select the Express option. |

- Keep text as short as possible but long enough to make sense.
- Write in complete sentences wherever possible, such as messages without character limits.

UI text should be unambiguous. Leaving out prepositions may lead to problems in identifying the relation between consecutive nouns. For example:

| | |
|---|---|
| **INSTEAD OF** | Press button unlock door. |
| **USE** | Press button to unlock door. |

- Ensure that your text is free from typos and grammar mistakes.
- Ask someone who isn’t familiar with the product if they understand the text.

## 2.2 Tone of Voice

When UI text is written in a neutral tone, it is more translatable and therefore better for localisation.

- Avoid slang or colloquial expressions as these are often difficult to translate.
- Try to aim for gender neutrality.
- Avoid cultural references if possible as they can be perceived differently in other countries.

## 2.3 Terminology

The consistent use of terminology is crucial for localisation. Using different terms for the same thing – or the same term for different things – only causes confusion.

- Use the same term for a certain concept and don’t mix terms.
- Work closely with the localisation team to develop a glossary of commonly used terms.
- Try to formalise terminology at the beginning of a project.
- Choose terms that are more translatable, i.e. where there is less chance of confusion.

## 2.4 Consistency

Along with terminology, it is important to be consistent with grammar and the structure of your UI text.

- Keep terminology consistent.
- Be consistent with verb tenses.
- Be consistent with the form of address.
- Use consistent wording for UI elements.

**Example:** You shouldn't have the dialog titles "Creating tasks" and "Create a note" – they should have the same structure:

EITHER "Create a task" and "Create a note" OR "Creating tasks" and "Creating notes"

# 3 Graphics

## 3.1 Culture Appropriateness

It is important to research your target markets before selecting images or colour schemes for your graphical interface to avoid cultural *faux pas*. Certain images may cause offence and colours may convey different meanings in different cultures.

- Work with local experts or someone who is familiar with the target audience to determine the appropriateness of colour choice, visual style, photos and other illustrations.
- If possible, use universally understood icons or localise them for each locale.

⚠️ Some cultures interpret a pointing finger as a rude or insulting gesture.

- Collaborate with UI or UX designers and the localisation teams to ensure that the graphics align with the intended message once they have been translated.
- Engage local users or testers to evaluate localised graphics.
- Avoid illustrations that are culturally specific to one locale, for example, an image of a sports celebrity may not be recognised in another culture.

The concept of a tree may vary between different locales

## 3.2 Separation of Text

Graphics with embedded text cannot easily be localised. The graphic may have to be recreated to insert the translated text. UI designers should try to avoid creating different graphics for each locale.

- If possible, separate text from graphics:
    - Use numbered callouts or captions;
    - Use layers in the graphics file so that the text can be easily accessed and replaced.

- If it is not possible to separate the text:
    - Use SVG files so that the text can be easily accessed for translation using XSLT;
    - Provide translators with clear instructions on how to localise it.

## 3.3 Text Expansion

Depending on the target language, the translated text can be much longer than the source text. It is important to allow for text expansion when designing your graphical interface.

- Ensure that UI layouts allow for flexible placement of text.
- Avoid designs where text is tightly integrated with graphics.
- Position text in graphics or images so that there is space for expansion.
- Convey text length limitations to the translators.
- Provide visual examples of graphics or images where text is used.
- Avoid using fixed positions for graphic elements as they may not fit with the translated texts.

## 3.4 Source Files

Graph and chart legends or image captions are difficult to translate when they cannot be visualised or accessed in context.

- Give localisation teams access to text layers by providing them with the image source files, such as .psd files for Photoshop.
- Provide sources for charts and graphs, such as Excel sheets.
- Maintain a version control system for graphic files to ensure localised graphics are organised and can be easily managed during updates and revisions.

# 4 Context

## 4.1 Product Onboarding

Without a clear description or a visual demonstration of the product, language specialists have very little context about the elements that they are localising, and therefore make a direct translation, which can lead to problems.

- If possible, organise a kick-off or onboarding meeting with the localisation team.
- Provide a presentation of the product.
- Provide a jargon-free description of the product and its purpose, understandable to a non-technical/non-expert audience.

## 4.2 Localisation Brief

Localisation specialists need as much contextual information on the product  as possible to enable them to understand its structure and purpose as well as the target audience.

- Provide information on whether the copy to translate is part of a test or finalised for production release.
- Provide contextual information for where elements such as buttons, menu items or messages appear in the product. This can be in the form of screenshots, mock-ups or a description of the cause of the message.
- Decide on your target languages early in the project to avoid unnecessary design changes and retroactive modifications that can result from the varying word structures and alphabets of different languages.
- Provide information on the target audience:
    - Age group, lifestyle, professional status, etc;
    - Tone of voice to employ, such as friendly or formal.

- Provide a description of  the characters in video games, and, if relevant, their gender.
- Provide information on user journeys and the whole product flow.
- Provide information on the context of graphics:
    - If possible, provide screenshots of the graphic in context;
    - Describe the intended message of the graphics.
- Provide information on the length restriction that applies to a string. If the translated string is longer than the space allocated on the user interface it may be truncated by the software.
- Provide help texts and training guides.

## 4.3 Forms of Communication

Communication between the product developers and localisation specialists is key to the success of a localisation project.

- Build relationships with UX designers, UI copy writers and tech writers.
- Convey important information to the localisation team.
- Create an online forum to facilitate exchanges between localisers and developers.

## 4.4 Testing

The localisation process can be greatly improved by giving localisation specialists access to the product so that they can visualise both the source and target texts in context.

- Allow translators to view an actual app or software UI so that they can see every label, message and tooltip as it appears to users.
- For best results, work with translators or Language Service Providers (LSPs) that use CAT tools specialised in software localisation, enabling translators to visualise the corresponding dialog boxes and UI elements as they translate.
- Involve localisers in testing and give them a chance to tweak the translation after testing.

# 5 Technical Considerations

## 5.1 Placeholders and Variables

It is important to remember that other languages have different grammar rules, for example, word endings that change according to the circumstances. Developers must ensure that placeholders and variables work with the syntax of all target languages.

- Consider that in some languages, pluralisation depends on the number of things being described. For example:

| **English** | 0 tickets | 1 ticket | 2 tickets… | | | |
|---|---|---|---|---|---|---|
| **Polish** | 0 biletów | 1 bilet | 2-4 bilety | 5-21 biletów | 22-24 bilety | 25-31 biletów |

- Try to avoid splitting strings. These lack context and may end up being translated incorrectly. If it's unavoidable, clearly state how the strings fit together.
- Keep placeholders to a minimum to avoid problems that may arise where translated text has to adapt to agree with the value that will replace the placeholder.

The English string below contains a placeholder {fromCountry}:

You're coming from {fromCountry}.

Depending on the value that replaces {fromCountry}, the French translation may be:

Vous venez **de** {fromCountry}.
OR Vous venez **du** {fromCountry}.
OR Vous venez **d'**{fromCountry}.

- Avoid variables or placeholders that are position dependent.

## 5.2 Length of Strings

A target language may be longer than the source language. This is especially the case when text is translated from English, which tends to be much shorter than some other languages, such as German or Turkish. You therefore need to consider this when writing UI text.

- Reduce the length of the source content so that localisation specialists are still able to stay within character limits.
- Allow for sufficient text expansion: up to 50% expansion from English.

## 5.3 Additional Information

Localising an UI is extremely difficult when strings lack context. Providing as much additional information as possible helps localisation specialists to understand the purpose of a string so that it can be translated correctly.

- Provide meaningful identifiers that help to place each string within the product's context.

- Provide comments to state, for example, whether the string is button text, a menu title, a message, etc.
- Provide images or screenshots of all the components or parts that make up the UI.

## 5.4 Fonts

Some fonts offer various alphabets and can support your localised UI better, while other fonts will likely cause problems in certain languages.

- Use flexible, Unicode-compliant fonts.

> ➔ You can find a list of the most commonly used Unicode fonts on Wikipedia: [List of Unicode fonts]()
>
> ➔ Unicode fonts are available to download for free from SIL International: [SIL International Unicode fonts]()

- Adapt the font size depending on the available space.

## 5.5 Local Conventions

Variables such as dates and times, currencies, units of measurement and phone numbers should be displayed in the correct format according to the device's locale.

- Use libraries to get your product to detect the right defaults, for example, whether temperatures should be shown in Celsius or Fahrenheit or in which format dates should be displayed.

> Consider user preferences: don't assume that users want the default settings based on where they're currently located.

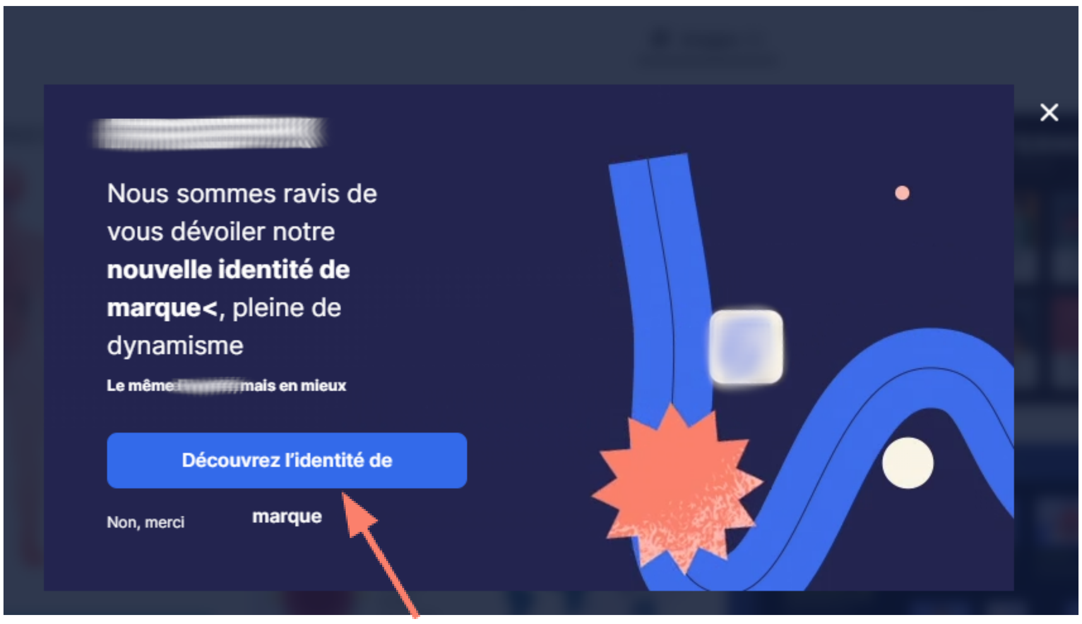
- Use the correct punctuation and formatting. For example:

| | |
|---|---|
| **Numbers** | Some countries use a decimal point, others a decimal comma. Likewise, the thousands separator can be a space, full stop, comma or apostrophe. |
| **Currencies** | Along with these differences in punctuation, the currency symbol is sometimes placed before the amount, in some countries after. |

## 5.6 UI Design

How you design the UI will affect whether it is displayed correctly after localisation. With a static design, it's likely that the localised UI will not appear as intended.

- Use a dynamic layout that allows for both text expansion and text contraction. That way, even if the UI is localised into other languages with content that is much longer or shorter, the design of the UI won't be affected.

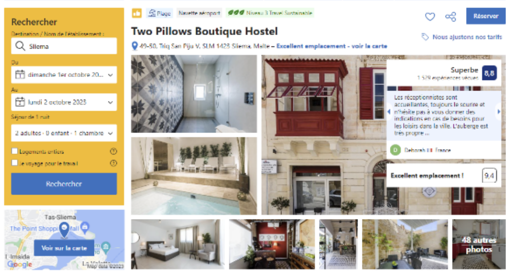


Nous sommes ravis de vous dévoiler notre **nouvelle identité de marque<**, pleine de dynamisme

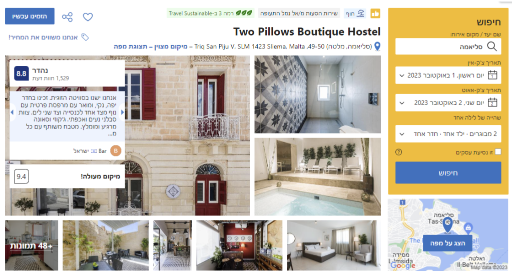
**Le même [illegible] mais en mieux**

The size of UI elements, such as buttons, should automatically adapt to ensure that the UI is correctly displayed after localisation. In the example above, the translated label is too long to fit on the button.

- Avoid using fixed width/height constraints for buttons, text fields, dialog boxes and other UI elements.
- Let the main container or wrapper adjust to the size of the elements contained within it.
- If localisation into a right-to-left (RTL) language, such as Hebrew or Arabic, is required, use a modular UI design as this can be easily flipped.


Rechercher
Destination / Nom de l'établissement :
Sliema
Du
dimanche 1er octobre 20...
Au
lundi 2 octobre 2023
Séjour de 1 nuit
2 adultes · 0 enfant · 1 chambre
Logements entiers
Je voyage pour le travail
Rechercher
Voir sur la carte
Plage
Navette aéroport
Niveau 3 Travel Sustainable
Réserver
Two Pillows Boutique Hostel
Nous ajustons nos tarifs
49-50, Triq San Pjju V, SLM 1423 Sliema, Malte – Excellent emplacement - voir la carte
Superbe 8,8
1 529 expériences vécues
Deborah France
Excellent emplacement ! 9,4
48 autres photos

Les réceptionnistes sont accueillantes, toujours le sourire et n'hésite pas à vous donner des indications en cas de besoins pour les loisirs dans la ville. L'auberge est très propre ...


חיפוש
שם יעד / מקום אירוח:
סליאמה
תאריך צ'ק-אין
יום ראשון, 1 באוקטובר 2023
תאריך צ'ק-אאוט
יום שני, 2 באוקטובר 2023
שהייה של לילה אחד
2 מבוגרים · ילד אחד · חדר אחד
זו נסיעת עסקים
חיפוש
הצג על מפה
חוף
שירות הסעות מ/אל נמל התעופה
רמה 3 ב-Travel Sustainable
הזמינו עכשיו
Two Pillows Boutique Hostel
אנחנו משווים את המחיר!
(סליאמה, מלטה) 49-50, Triq San Piju V, SLM 1423 Sliema, Malta – מיקום מצוין – תצוגת מפה
נהדר 8.8
1,529 חוות דעת
Bar ישראל
מיקום מעולה! 9.4
+48 תמונות

אנחנו ישנו בסוויטה הזוגית. זכינו בחדר יפה, נקי, ומואר עם מרפסת פרטית עם נוף מצד אחד לכנסייה וצד שני לים. צוות סבלני נעים ואכפתי. ג'קוזי וסאונה מרגיע ומומלץ. מטבח משותף עם כל מ...

Example of a flipped display:

top: LTR language display

bottom: RTL language display