



ADAPTING A SYSTEM FOR INTERNATIONAL USE



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INTERNATIONALIZATION (N18I)

- Internationalization refers to the design and development of software systems that can be adapted to different languages, regions, and cultures.
- The "N18I" acronym represents the number of characters in the middle of the term.
- It involves separating the application's functionality from its presentation layer, making it easier to support multiple languages.

GLOBALIZATION (N11G)

- Globalization focuses on making software systems globally accessible and usable.
- The "N11G" acronym represents the number of characters in the middle of the term.
- It involves designing software to handle various cultural conventions, such as date and time formats, numeric systems, and currency symbols.

LOCALIZATION (N10L)

- Localization involves adapting a software system for a specific locale or target market.
- The "N10L" acronym represents the number of characters in the middle of the term.
- It includes translating the user interface, documentation, and content into the language of the target audience and considering their cultural preferences.

DIFFERENCES

- Internationalization focuses on enabling software to support multiple languages and locales.
- Globalization ensures that software functions correctly across different cultures and regions.
- Localization tailors the software to a specific locale, including language translation and cultural adaptation.

ADDITIONAL ADAPTATIONS FOR INTERNATIONAL USE

Beyond translation, other important adaptations for international use include:

- Date and time formats
- Numeric and currency formats
- Units of measurement
- Address formats
- User interface layout adjustments

CONNECTION TO SERVICE LEVEL REQUIREMENTS (SLR)

- Service Level Requirements (SLR) define the performance, reliability, and availability expectations of a software system.
- Internationalization, globalization, and localization affect SLR by ensuring the system meets the needs of international users.
- Failure to address these principles adequately may result in a subpar user experience and customer dissatisfaction.

PYTHON AND INTERNATIONALIZATION

- Python's "gettext" library enables internationalization and localization of Python applications.
- Developers can extract translatable strings from their code and provide translations for different languages.
- Using the library, the application can load the appropriate translation based on the user's locale.

```
import gettext

# Set the path to the directory containing translation files
translations_directory = 'translations'

# Specify the desired language (e.g., 'fr' for French)
language = 'fr'

# Initialize the gettext translation object
translation = gettext.translation('messages', translations_directory, [language])
translation.install()

# Translatable string
welcome_message = _('Welcome to our application!')

# Print the translated string based on the user's locale
print(welcome_message)
```

**THANK'S FOR
WATCHING**

