Accessing a Global Market:
A Primer on Game Localization

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Who I Am

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ContextLost

Roblox goes International

- Localization tools are live
- Spanish, French, German, and Portuguese are live
- Coming soon: more languages!

What is Localization?

Localization is adapting your game for:

- A different language
- A different culture
- A different community

Key Takeaways

- Localization is easy
- Localization is hard

Why Localize?

Why Localize?

- More growth
- More players
- More profit

It's easy to start!

Localization is Easy

Published as JBT - Roblox Studio
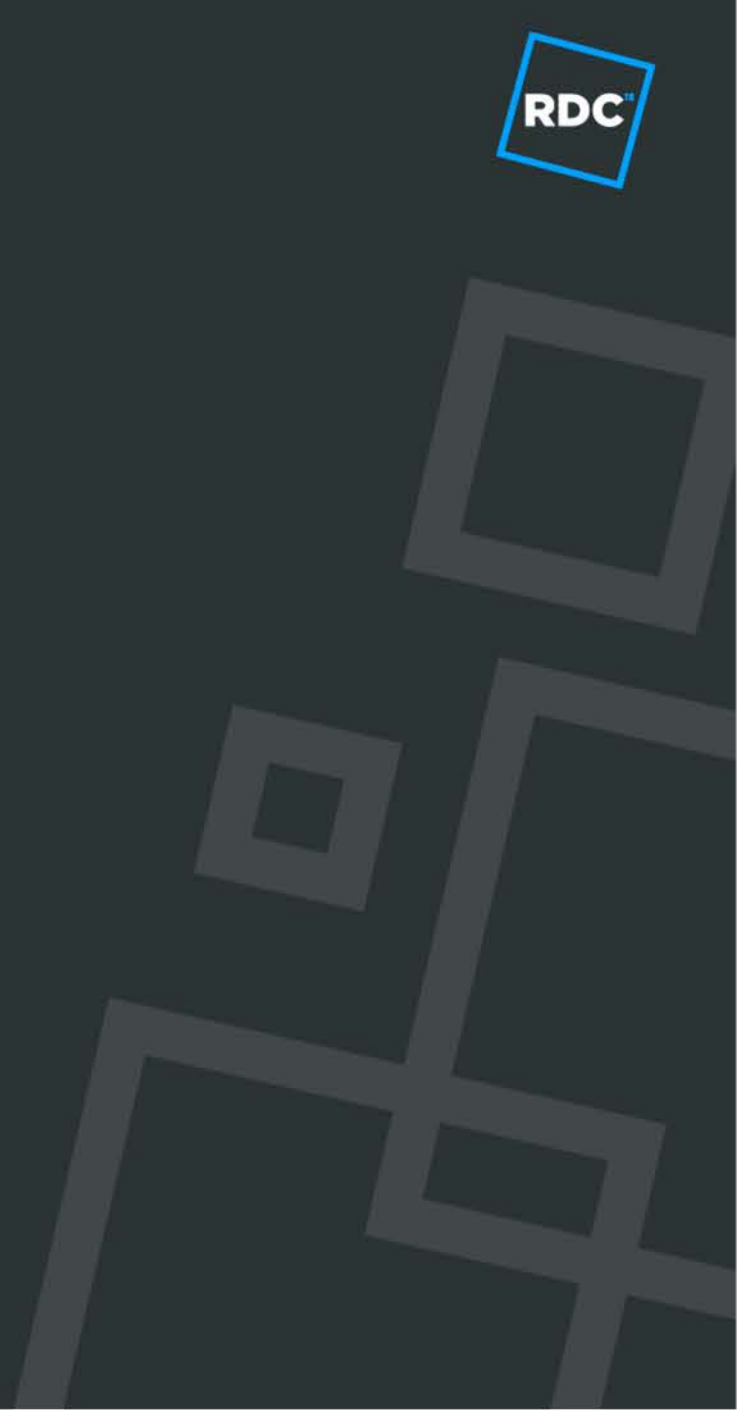
FILE   HOME   MODEL   TEST   VIEW   PLUGINS   ContextLost

Manage Plugins   Plugins Folder   Rig Builder   Animation Editor   Text Capture   Export   Import   English   Spanish   Dialogue Editor   Create Dialogue   Reinstall Scripts   Test Connection   Sync In   Toggle Polling   Tag Window   World View   Add Collision Group   Remove Collision Group   Configure Collision Groups   Edit Part Collision Groups

Tools   Animations   Localization Tools   Test Language   Roblox Dialogue   Rojo Plugin 0.4.4   Instance Tagging   Collision Group Editor

JBT

@badccvoid   9:00 AM Schedule: Breakfast   @aaaa9189

Chat '/?' or '/help' for a list of chat commands.

Breakfast
Grab a bite to start your day in the cafeteria!

Tap here to chat...

ContextLost
Account: 13+   Money   1,000,200

Criminal	
Police	
Prisoner	1,000,200
ContextLost	1,000,200

Explorer

Filter workspace (Ctrl+Shift+X)

- Workspace
- Players
- CoreGui
- Lighting
- ReplicatedFirst
- ReplicatedStorage
- ServerScriptService
- ServerStorage
- StarterGui
- StarterPack
- StarterPlayer
- Teams
- SoundService
- Chat
- LocalizationService
- TestService

Properties

Filter Properties (Ctrl+Shift+P)

Output

Not loading player data because StudioData is off.
13:57:33.298 - GamePassId '754984723' is not of type Game Pass. Please use MarketplaceService:PlayerOwnsAsset instead. (x3)
Giving ContextLost new missions
13:57:33.530 - GamePassId '754984723' is not of type Game Pass. Please use MarketplaceService:PlayerOwnsAsset instead.

Find Results

Properties   Toolbox   Game

Run a command

Published as JBT - ...   Google Sheets - Go...   1:57 PM   7/6/2018

Localization is Hard

Language Is Weird

- Human language is weird
- Complicates UI design
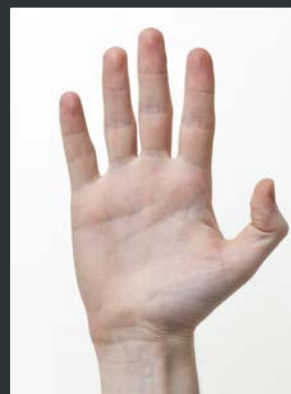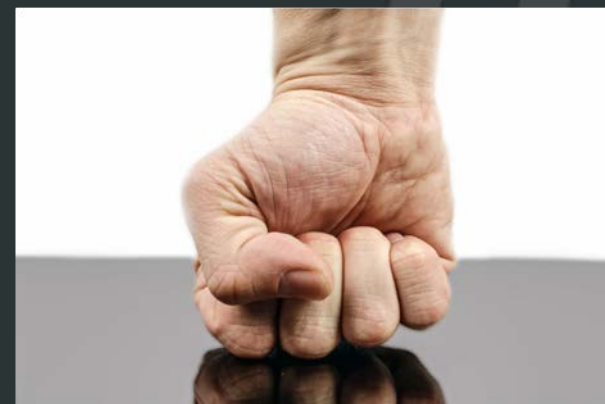- Language trivia can help avoid pitfalls

Gender

- English does not have grammatical gender

- Grammatical gender is intrinsic in many languages
  - Spanish, German, Russian, Portuguese, others...

- Every noun has a gender

♀ la roca

♀ la mano

♂ el puño

Conjugation

- Forms of words depends on
  - Tense
  - Gender of target
  - Plurality of target

- Affects
  - Verbs
  - Adjectives
  - Determiners (a, an, the)

Conjugation in Spanish

	Present	Past	Future
anyone	demonstrate	demonstrated	will demonstrate

To demonstrate → demonstrar

	Present	Past	Imperfect	Conditional	Future
I	demuestro	demostré	demostraba	demostraría	demostraré
you	demuestras	demostraste	demostrabas	demostrarías	demostrarás
he/she	demuestra	demostró	demostraba	demostraría	demostrará
we	demostramos	demostramos	demostrábamos	demostraríamos	demostraremos
you (plural)	demostráis	demostrasteis	demostrabais	demostraríais	demostraréis
they	demuestran	demostraron	demostraban	demostrarían	demostrarán

RDC

Design for Localization

RDC

You hit ContextLost with a sword
WoodReviewer hit GollyGreg with a hatchet

{0} hit {1} with a {2:translate}
Easy, right?
NO!

Better Alternative:

RDC2018 🗡 ContextLost

WoodReviewer 🪓 GollyGreg

Plurals

- In English: 2 noun forms
  - Singular: "You got 1 coin"
  - Plural: "You got 20 coins"

- Other languages have more noun forms…
  - Dual (Arabic, Hebrew, Irish, Scottish, Hawaiian)
  - Paucal ("a few", Arabic sometimes, Hopi)
  - Depending on last digit (Russian)

Design for Localization

You got 200 gold coins!

OK

Better Alternative:

Purchase complete!

🟡 200

OK

Number Formatting

- Rules differ!

USA / UK	`1,000,000.99`
Russia	`1.000.000,99`
France	`1 000 000,99` ← Spaces!
Switzerland	`1'000'000,99`
India	`10,00,000.99` ← Grouped differently! Not every 3!

- Solution: Use our Localization system's format strings!

Text Length

German: Kraftfahrzeug-Haftpflichtversicherung
English: Motor vehicle liability insurance

Italian: Visualizzazioni
English: Views

Text Length

English Characters	Extra space needed for translation
<= 10	100% to 200%
11 - 20	80% to 100%
21 - 30	60% to 80%
31 - 50	40% to 60%
51 - 70	31% to 40%
> 70	30%

Source: IBM Globalization

Design for Localization

- Avoid parameters in a sentence
- Use alternatives
  - Icons
  - Tabular data
- Use Localization system format strings for numbers
- Leave enough room for overflow

Translation is Creative

- A perfect literal translation is often the wrong translation
  - Humor
  - Cultural references
  - Slang
  - Idioms

- Requires creativity, two way communication

Creative Localization: 2018 Egg Hunt

RDC

Original English	Spanish	Translated to English
We hunt eggs all week long: Monday, Tuesday, Wednesday, Thursday, Fried Egg.	Buscamos huevos toda la semana: lunes, martes, miércoles, huevos y viernes.	We look for eggs all week: Monday, Tuesday, Wednesday, eggs, and Friday.

Creative Localization: 2018 Egg Hunt

RDC

Original English	Spanish	Translated to English
We hope you are having an eggcellent day!	Gallina que bien come, huevos pone.	A chicken that lays eggs is one that eats well.

Beyond Language

Culture is Context

- Different society!
  - Tastes
  - Values
  - Priorities
  - Media exposure

Culture and Genre

- Potentially different preferences
    - Gameplay
    - Art
- Example: League of Legends character card art
    - Completely different art for China and NA

Community

- How do you build an audience?
- How do users report issues?
- How will you support your foreign community?

The Roblox Localization System

Automatic translation system

- Easy to get started

- Support translating a game with no changes to the game
  - Just add LocalizationTables
  - Everything magically translates

- Future:
  - Automatically generated tables
  - Cloud-based system for managing translations

Automatic translation system

- Not a 100% solution by design
- Can't translate every possible UI
- Managing translations by source string is brittle
- The last resort for unmaintained games

Localization APIs

- Use Localization APIs for more control
  - LocalizationService
  - LocalizationTable
  - Translator
  - GuiBase2d (AutoLocalize, RootLocalizationTable)

My Recommendations

- No text in source code. Only keys!

- Organize your tables
    - Multiple tables?
    - LocalizationService, ReplicatedStorage, ReplicatedFirst?

- Own your workflow
    - Write your own localization module
    - Write your own localization plugin

- Disable AutoLocalize if not used

- Always localize on the client

Links for Later

- Localization Tools Announcement with Video Tutorial
  https://devforum.roblox.com/t/introducing-our-new-localization-tools/102105

- Auto Localization Tools Tutorial
  http://robloxdev.com/articles/Roblox-Localization-Tools

- Advanced Localization System Tips
  http://robloxdev.com/articles/Localizing-Your-Roblox-Game

- Localization Tools Advanced Cases and Troubleshooting
  http://robloxdev.com/articles/Localization-Support-and-Troubleshooting

- Localization System Format Strings
  http://robloxdev.com/articles/Localization-Converting-Strings

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Q&A

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