

Internationalization-ing

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What is Internationalization?

i18n

Localization (l10n)

Support Right-to-Left (RTL)

**Use mindful
abbreviations and
formats**

**Watch iconography
semantics**

Why Internationalize Your App



**Makes the product
accessible to more
people**

**Makes it more
comfortable for others**

**Makes a higher quality
app**

Localization

Localization

- Often the most obvious part of i18n
- Requires each of your user facing strings are referenced from a string resources file
- Then there are alternates for each of these strings for each language you support

Android

values/strings.xml

```
<string name="greeting">Hello, %s</string>
```

values-es/strings.xml

```
<string name="greeting">Hola, %s</string>
```

Android

context.getString(R.string.greeting)

OR

<TextView android:text="@string/greeting" />

react-localization¹

```
let strings = new LocalizedStrings({  
  en:{  
    greeting:"Hello, {0}"  
  },  
  es: {  
    greeting:"Hola, {0}"  
  }  
});
```

¹ <https://www.npmjs.com/package/react-localization>

react-localization¹

```
<Text>  
  {strings.greeting}  
</Text>
```

¹ <https://www.npmjs.com/package/react-localization>

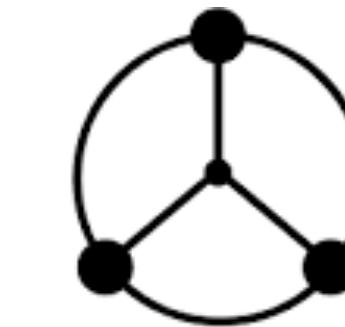
Translating

- Internal
- Open source
- Service

Localization Tools

transifex

 *crowdin*



JOTIVE
lokalise

Search in file



SOURCE STRING

DONE



COMMENTS

SEARCH TM

TERMS

- Welcome!
- Save as...
- View
- About...
- About Me
- Current Password
- New Password
- Confirm New Password
- Change Password
- Password recover
- Your password reseted successfully!
- Read message
- Are you sure you want to delete this me...
- Search in messages
- Compose Message
- No date provided
- Quick Start

Confirm New Password

CONTEXT ▾ EDIT

/umbrella_app.xml

Context: confirm_password

Changer le mot de Pass



20 / 22

SAVE

FRENCH TRANSLATIONS ▾



Changer le mot de Pass

2 minutes ago by Kelly Wonder (kattyardea), Translate step

0



TM AND MT SUGGESTIONS ▾



Changer le mot de Pass

Confirm NewChange Password

Ardea application's TM, 55% match

Don't assume text length

Localization with an API

- Set language from device or let user pick
 - Inform API of language.
- Use that language to fetch from your translation file

Locale safe text manipulation

"TITLE".toLowerCase() -> "title" in English

"TITLE".toLowerCase() -> "title" in Turkish

Abbreviations and Formats

**Not everyone uses and
knows the same
abbreviations**

Avoid idioms

**People prefer different
formats**

**Display the user's
currency**

Right-To-Left

**Support right aligned
text**

Bi-Directional Isolation tag²

User <bdi>إيان</bdi>: 90 points

² https://www.w3schools.com/tags/tag_bdi.asp

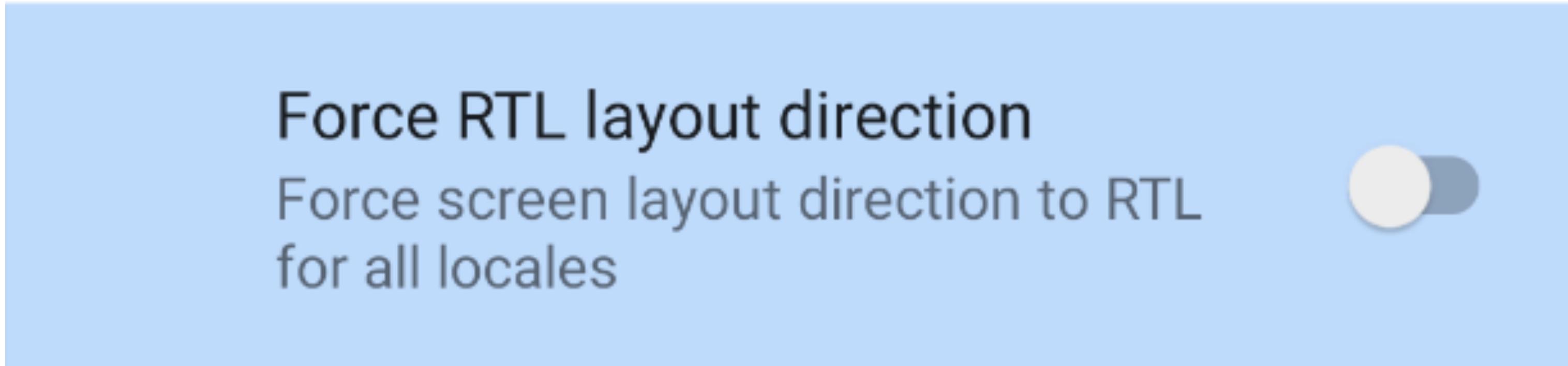
**Also reverse parts of
layouts and breadcrumbs**

**Use start/end over left/
right**

Reverse directional icons and icons showing text direction

Try it out

- Chrome: chrome://flags/#force-ui-direction
 - Android: Developer settings



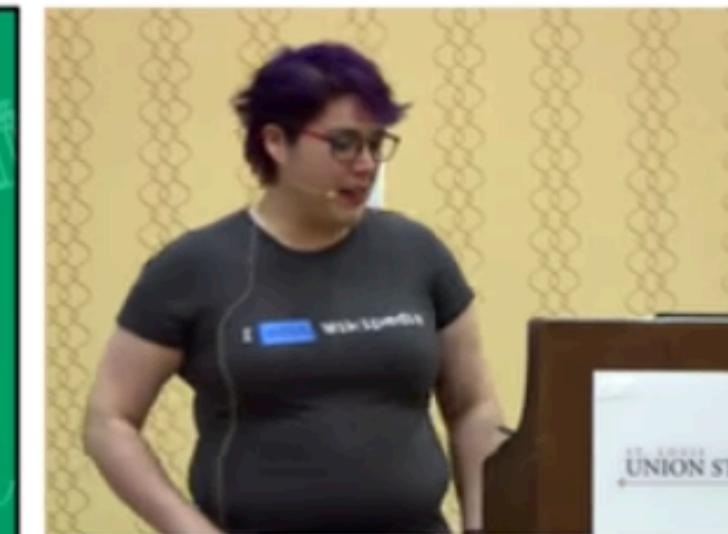
RTL emoticon example³

Typing : and then D



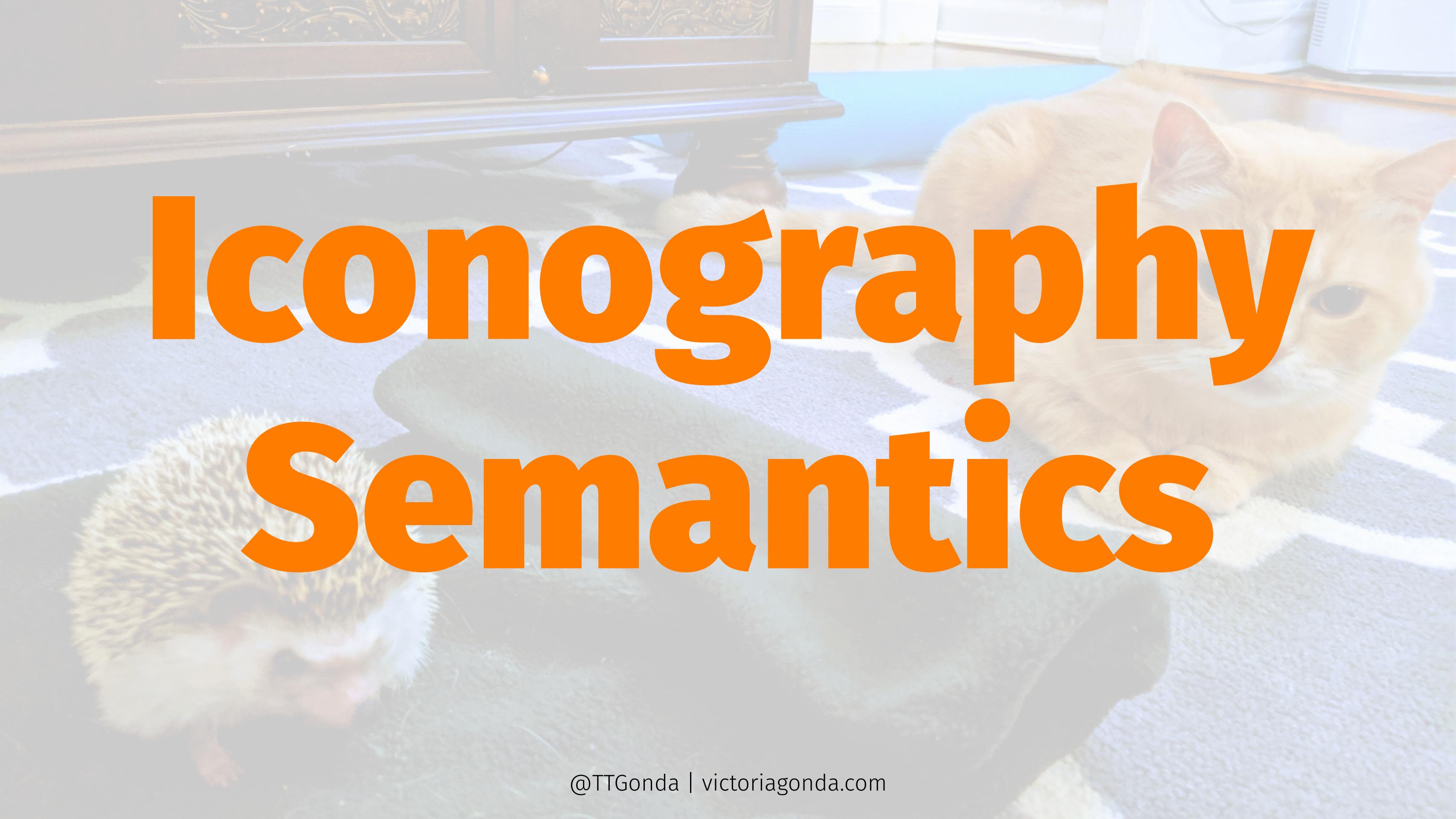
³ <https://youtu.be/xpumLsaAWGw>

"Wait, it does ??tahW: How supporting Right-to-Left can expose your bad UX" by Moriel Schottlender³



Sept 28-30, 2017
thestrangeloop.com

³ <https://youtu.be/xpumLsaAWGw>



Iconography Semantics

Use icon meaning

**Symbols might not mean
the same thing in all
cultures** 🙏

**Watch for icons with
currency and letters**

Testing

- Change language in browser or on device
 - Try RTL
- Ask someone from another part of the world or who speaks another language to try your app

Some links

- Short i18n Checklist: <https://w3c.github.io/i18n-drafts/techniques/shortchecklist.html>
- Specifications: <https://www.w3.org/International/techniques/developing-specs>
- i18n checker: <http://validator.w3.org/i18n-checker/>

Thanks

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