Accelerating Information Technology Innovation

http://aiti.mit.edu

India Summer 2012
Lecture 8 – Django Admin Pages/UI Design Tips

Issues from Yesterday

- Pass circular ForeignKey references as strings, but *not* the full path if it's in the same file. (e.g. `ForeignKey('City')` not `ForeignKey('places.models.City')`)

- `syncdb` only adds, it does not update

- To update (wiping all data), use "`reset [application]`"

Admin Pages on Django

Django Admin Pages

- Django comes with an admin page module

  - Off by default

- Can be used to add/change/remove Model instance objects

- Largely automatic, but can be custom-built

Django Admin Pages

- Enable by uncommenting/adding in settings.py:

```python
INSTALLED_APPS = {
    # ...
    'django.contrib.admin',
    # ...
}
```

- Enable URLs by uncommenting/adding in urls.py:

```python
url(r'^admin/', include(admin.site.urls)),
```
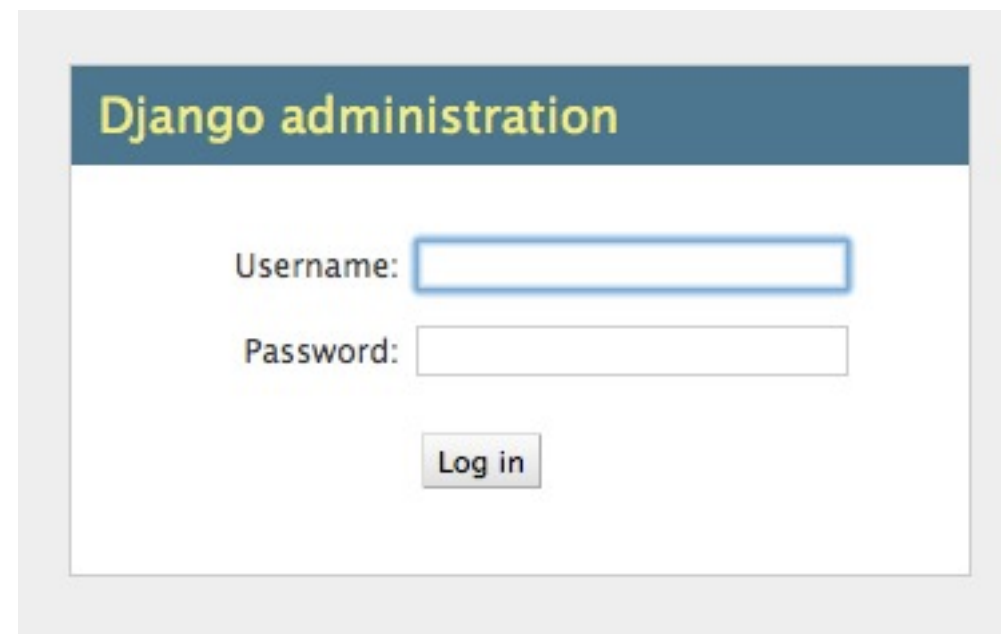
Django Admin Pages

- Enable Models by adding admin.py in your app:

```python
from django.contrib import admin
from places.models import State

admin.site.register(State)
```

- Visit at: `http://[your site]/admin/`

Django Admin Pages

Django Admin Pages

Django Admin Pages

Django Admin Pages

Playing as Admin

Playing as Admin

Enable and log in to the admin site.
Make sure Cities can be edited in it.

Playing as Admin

Create a new city in the admin page.
List the cities.

Designing Usable UIs

Paper Mockups

Paper Mockups

- Design your UIs on paper first!

- You can draw whatever UI you want

- Show to customers

  - Customers can work with it themselves

  - Can change it easily (not like code!)

"And so begins the process..." by Dave Hoover
Licensed under a Creative Commons Attribution 2.0 Generic License
<http://www.flickr.com/photos/redsquirrel/4870920248/>

Case Study

- Suppose you had to write an app for looking up train times.

- What design would you use?

- 5 minutes: In a group, work together to mock up your app on paper.

- Then, come up as a group to mock it up for other students' feedback.

UI Design Tips

- Organize your app's UI by use case.

- Make common activities easy to get to.

- Keep it simple, not complex.

- Your UI should be consistent (with user expectations)

Visual Cues

Visual Cues

- Users have expectations when they see a "visual cue"

  ○ Pull handles should be pulled

  ○ Brighter colors draw attention

  ○ ⚠ means warning

  ○ Cues may be cultural!

"Worst-case Scenario" by Dave Hoover
Licensed under a Creative Commons Attribution 2.0 Generic License
<http://www.flickr.com/photos/redsquirrel/4870920248/>

Visual Cues

- Users have expectations when they see a "visual cue"

  ○ Pull handles should be pulled

  ○ Brighter colors draw attention

  ○ ⚠ means warning

  ○ Cues may be cultural!
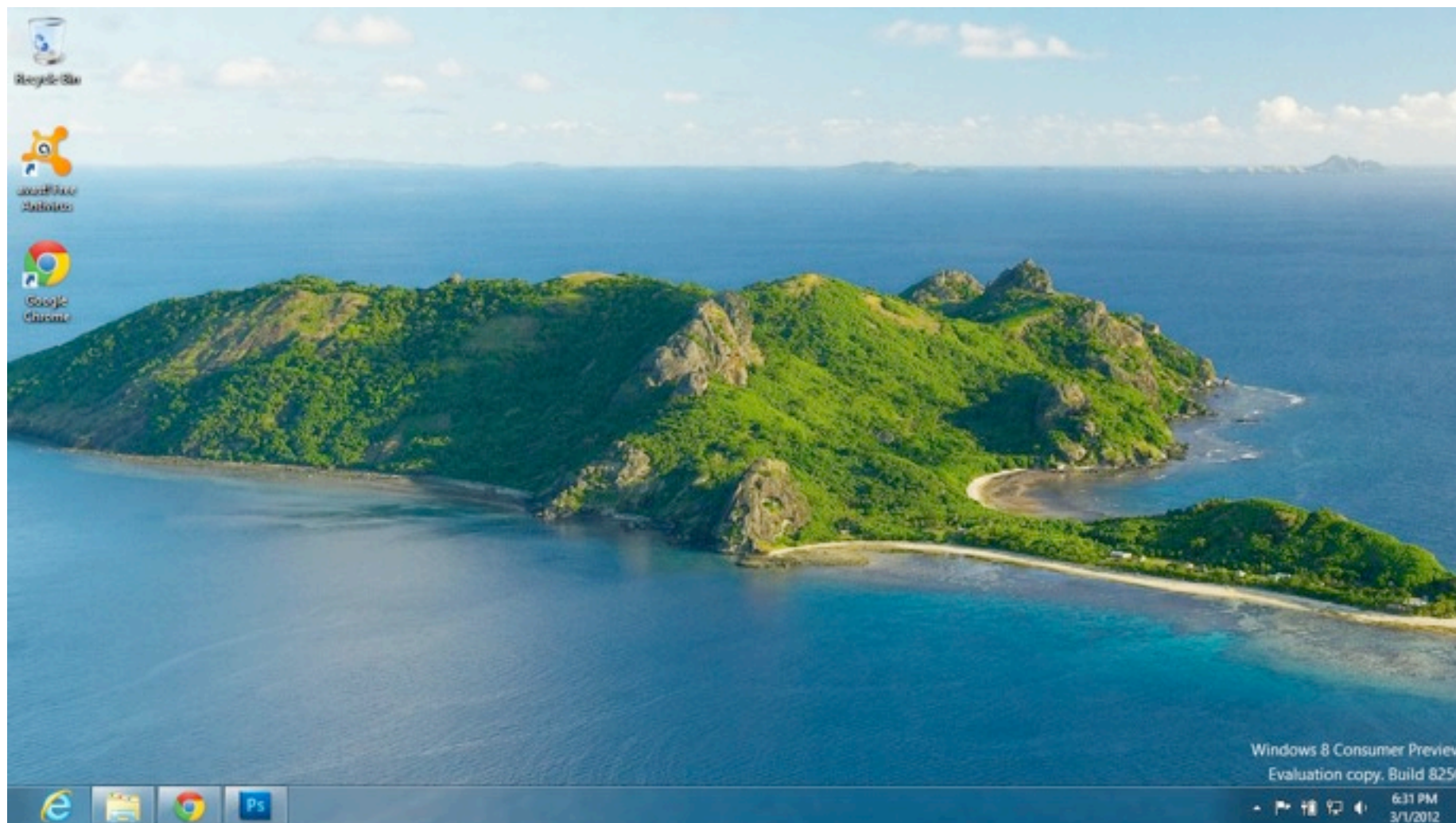

"Worst-case Scenario" by Dave Hoover
Licensed under a Creative Commons Attribution 2.0 Generic License
<http://www.flickr.com/photos/redsquirrel/4870920248/>

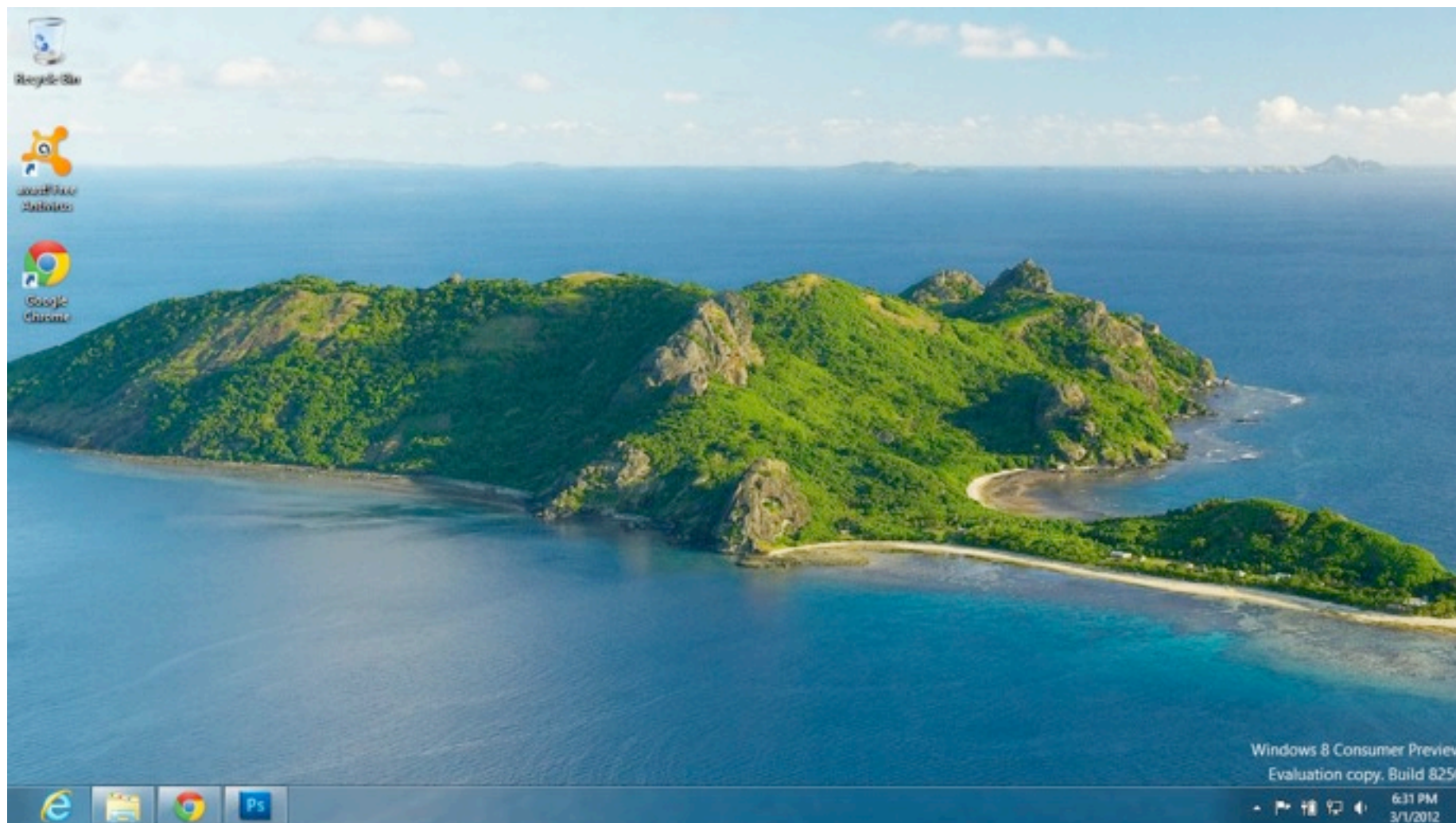*"I constantly screw it up and feel like an idiot."*

Visual Cues

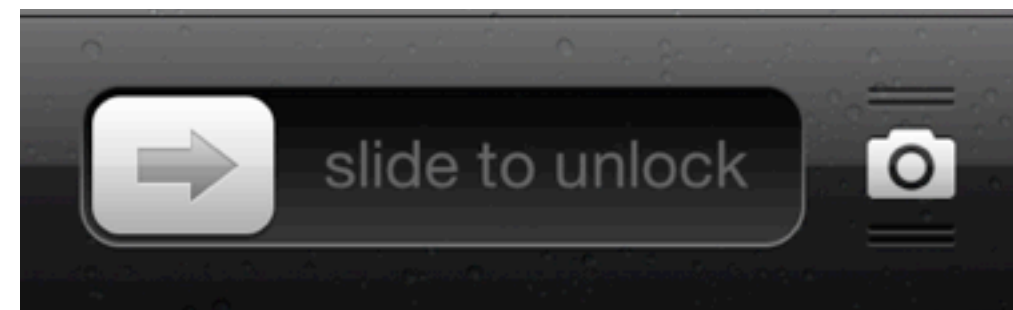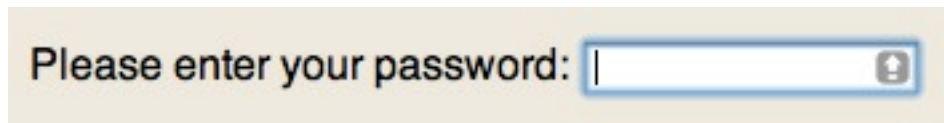- Users *don't* have any expectations when they don't see an expected "visual cue"

Visual Cues

- Users *don't* have any expectations when they don't see an expected "visual cue"

"Where's the Start menu? How do I get back to the Start Screen?"

Visual Cues

- Don't be afraid to invent new visual cues if it can help your user!

- Make sure you use visual cues that make sense for your users.

  - Give your users your app and see what they figure out quickly and what they don't.
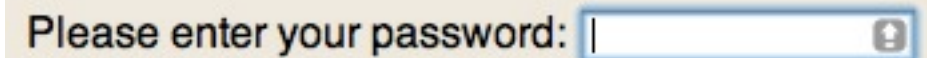
Visual Cues

- Don't be afraid to invent new visual cues if it can help your user!

- Make sure you use visual cues that make sense for your users.

  - Give your users your app and see what they figure out quickly and what they don't.

Please enter your password:

"Oh! Caps lock is on!"

PayPal, Inc. [US] https://www.paypal.com/home

Personal   Business

PayPal™   Buy ▾   Sell ▾
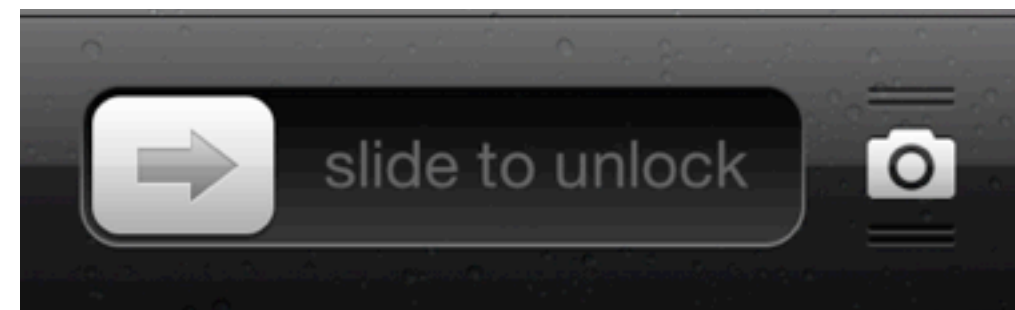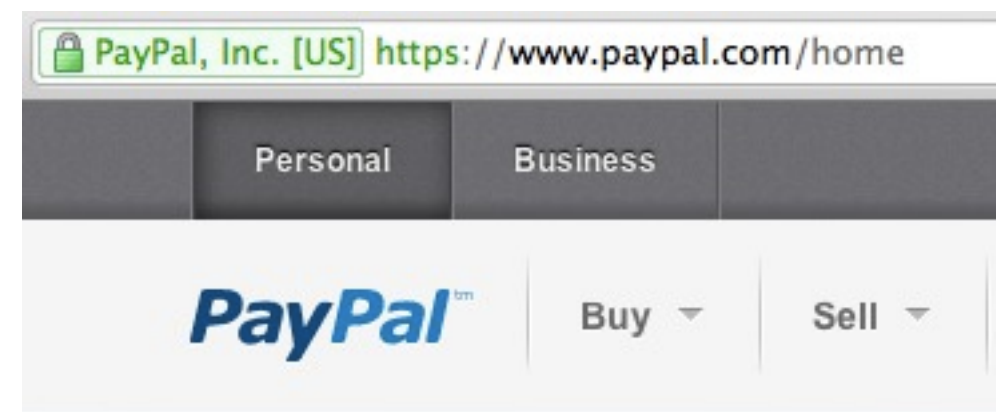
slide to unlock

Visual Cues

- Don't be afraid to invent new visual cues if it can help your user!

- Make sure you use visual cues that make sense for your users.

  - Give your users your app and see what they figure out quickly and what they don't.

"Oh! Caps lock is on!"

"I must be on the REAL PayPal website!"

Visual Cues

- Don't be afraid to invent new visual cues if it can help your user!

- Make sure you use visual cues that make sense for your users.

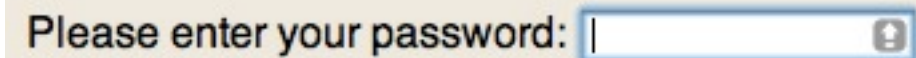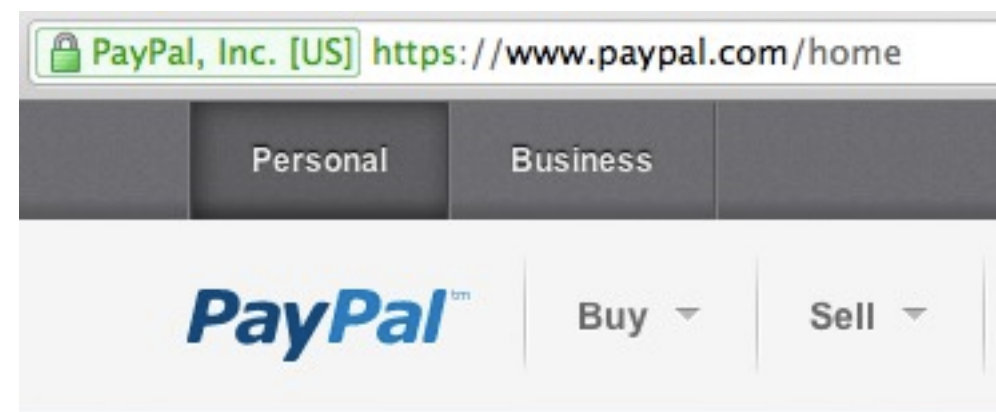   - Give your users your app and see what they figure out quickly and what they don't.
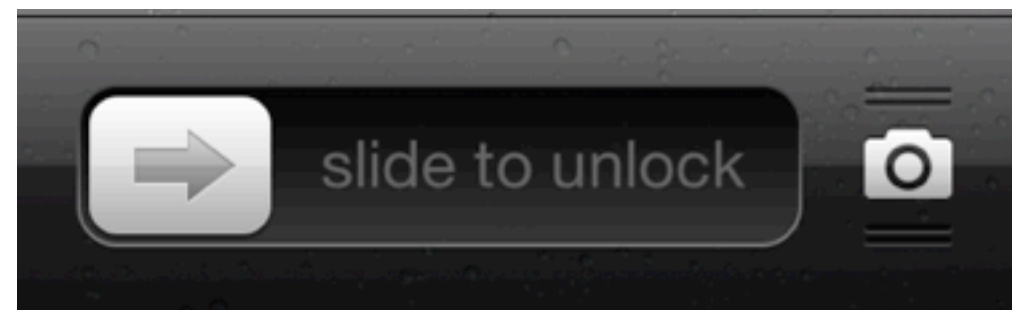
Please enter your password:
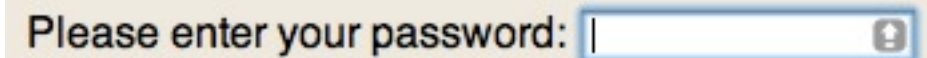
"Oh! Caps lock is on!"

PayPal, Inc. [US] https://www.paypal.com/home
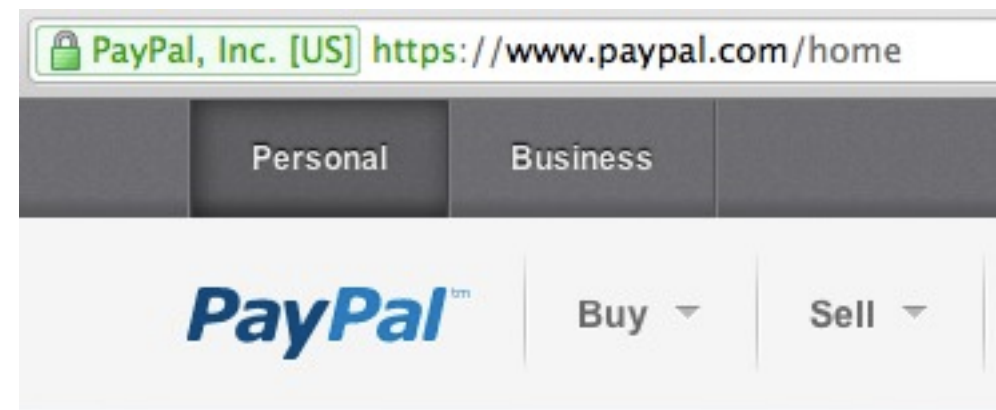
Personal   Business

PayPal™   Buy ▾   Sell ▾

"I must be on the REAL PayPal website!"

slide to unlock

*"I need to slide that button to the right!
or I can drag the camera button up to take pictures!"*

Final Note:
Don't be afraid to study the UI of other popular apps!

You might gain some insight into your own app's design!

References

- Django "Writing your first Django app, part 2":
  <https://docs.djangoproject.com/en/1.3/intro/tutorial02/>

- Django "The Django admin site":
  <https://docs.djangoproject.com/en/1.3/ref/contrib/admin/>

- More on mockups:
  <http://www.interaction-design.org/encyclopedia/mock-ups.html>

- A useful website to help make mockups:
  <http://www.balsamiq.com/products/mockups>

- Some example mockups (maybe more artsy than you need):
  <http://webdesignledger.com/inspiration/18-great-examples-of-sketched-ui-wireframes-and-mockups>

References

- "Effective Visual Communication for Graphical User Interfaces" <http://web.cs.wpi.edu/~matt/courses/cs563/talks/smartin/int_design.html>

- UI is worth a class in its self, but some more tips can be found at: <http://www.theomandel.com/docs/Mandel-GoldenRules.pdf>

- There's also three short blog posts about UX (user experience) for technology startups on "Ghost in the Pixel":

  ○ <http://www.ghostinthepixel.com/?p=714>

  ○ <http://www.ghostinthepixel.com/?p=719>

  ○ <http://www.ghostinthepixel.com/?p=729>