

Exactness and Clouseau

Using Tools to Improve the EFL and Its Applications



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Exactness and What It Does

- Pixel-perfect regression testing for the EFL
- Supports running tests in parallel
- Does not depend on X/Wayland/anything

How to Use It

1. Record (once): `exactness -r test_list.txt`
2. Init (once): `exactness -i test_list.txt`
3. Play (nightly): `exactness -p test_list.txt`

What Does It Not Do?

- Does not work well with animations
- Only as fast as the slowest recording
- Pixel-perfect is... Pixel-perfect

Clouseau – The UI Inspector

What Is Clouseau?

- Clouseau needs no introduction

What Is Clouseau (the helpful version)?

- UI inspection tool
- Lets you query properties of UI elements
- Lets you inspect the pixels of the canvas
- A very useful debugging utility

Why It Came to Life

- Querying UI objects using `printfs/debugger` is annoying
- So many things could be wrong and would need to be queried

How It Works

- Runtime class provided information
 - Hooking on EFL funcs (old legacy way)
 - Querying Eo (current way)
- Eet for serialization
- Built-in into Elementary (can be activated globally)
- Not limited to GUIs

How To Use It

- Quick start: `clouseau ./appname`
- Launch the client: `clouseau`
- Enable globally in `elementary_config`
- Debug just one app: `clouseau_start ./appname`
- Change IP to inspect remote applications

Advance Usage

- Click "Save" to save an Eet dump of the tree
- Click "Work offline" and then load the Eet
- You can also save a screenshot of the UI into the eet dump

Future Plans

- Live-edit of object properties
- Better UI
- Support only showing high-level objects (`elm_widgets` and up)
- Get more information from specific classes (specific elm widgets)
- Suggestions?

Thanks for Listening,
Questions?