

PUF Repository Contents

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Objective

Describe what is contained in the PUF repository.
Be useful for using and extending existing code.

If you still have questions about some of the things, ask.
I can look at particular things more closely if there is confusion.

Overview

Description of files and folder in the PUF repository.
Additional data is provided in the sections below.
Level is relative to the Gestures folder.

level	File / Folder	Description
0	Gestures	Root folder for things related to this project.
1	Puf_Enrollment	An IntelliJ IDE project folder. Contains no useful files.
1	android_apps	Folder containing android apps. They are used to collect data.
2	Puf_Enrollment	Designed as a demo app. Shows how to utilize the library .jar file.
2	data_collector	Original data collection app for polyline (simple) shape data. Uses a custom view to draw a polyline to the screen. The user traces this polyline.

		In the original version of this script, The data was emailed as output. I think in later versions it is just saved to a file.
2	swipe_box	This app collects Geometric (complex) shape data. <i>Description below has more detail.</i>
1	data	Contains both new and old data. Old data is Polyline (simple) shapes. New data is Geometric (complex) shapes.
2	OutputCSVs	Polyline (simple) shapes data.
2	new_form_output	Geometric (complex) shapes data.
3	swipe_box/nexus_7	Gson output of data generated by the swipe_box app.
1	library	Analysis programs and scripts.
2	gestures_api	Project directory for library functions. Library functions provide the ability to analyze touch screen pressure data.
4	UD-PUF/src	All folders except roc_curve_analysis, data, and test contain code compiled into the library.
5	roc_curve_generation	R scripts for generating an ROC curve using data generated by the CompareValueGenerator.java file.
2	python_scripts*	Python 2 scripts for analyzing polyline data. Script functions are described in the readme.
3	data_mining_scripts*	Machine learning scripts.
3	Variability analysis scripts*	There is nothing here. The readme describes variability analysis that was performed elsewhere.
1	sandbox	Folder in which data sets are sorted into folders based on what shape they represent. This was only used for the Geometric shapes.
2	combine_data_folders.bash	Moves data sets for the same shape into the same folder. This was to get it into the format expected by the analysis program.

* := The readme of this folder is useful.

Data

Polyline

Referred to as simple shapes in the paper.

Geometric shapes

Referred to as complex shapes in the paper.

Swipe_box

The code had this in it.

This is a prompt that it has.

It describes what is done.

```
String instruction_text = "";
instruction_text += "Test Swipe Box - test that the swipe-box activity is working\n";
instruction_text += "Analyze Responses - write an analysis of responses collected with
'Collect Swipe Responses' button to this edit text\n";
instruction_text += "Output Responses to Json - output responses collected with 'Collect
Swipe Responses' button in Json format to the filesystem\n";
instruction_text += "Save Responses - save responses collected with the 'Collect Swipe
Responses' button to shared preferences\n";
instruction_text += "Press Collect Swipe Responses - present several challenges which
can be authenticated against(this does not generate a data set)\n";
instruction_text += "Authenticate Against Responses - authenticate against the
responses gathered using 'collect swipe responses' button\n";
instruction_text += "Output analysis to CSV - after analysis has been run, output to csv
on file system\n";
instruction_text += "Load Responses - load previous responses from shared
preferences\n";
instruction_text += "Generate Data Set - press to generate a data set\n";
output_console_edit_text.setText(instruction_text);
```