

FAMILIAR EXPERIMENT

PREREQUISITES FOR RUNNING THE FAMILIAR EXPERIMENT

- Java Runtime 6 or 7 is installed and enabled.
- [RecordMyDesktop](#) utility is installed and configured.

CONTENT OF THE FAMILIAREVALUATION DIRECTORY

Folder or File Name	Description
myFiles	An empty folder where students save all of the created files, including videos. Before you start, you will rename this folder to include your name (see below).
Bin	Contains jar for FAMILIAR tool: GUI-based application (<code>FamiliarTool-1.0.5.jar</code>)
Instructions.pdf	This document.

TRIAL RUN BEFORE STARTING THE FAMILIAR EXPERIMENT

- [1] Download <https://www.dropbox.com/s/b6zxkpyhayk3nad/FAMILIAREvaluation.tar.gz> file and save it to your home directory `/home/my_user_name`
- [2] Extract the content: `tar -zxvf FAMILIAREvaluation.tar.gz`
- [3] Navigate to the directory `/home/my_user_name/FAMILIAREvaluation` and rename folder `myFiles` to the one that has your first and last name (e.g., `PhilippeCollet`), and leave it that way.
- [4] Start recording the video session: Run `RecordMyDesktop`, then configure it to encode on fly and click on red button displayed in the task bar.
- [5] Open console, and navigate to `/FamiliarEvaluation/Tools`.
- [6] Run the FAMILIAR Tool: `java -Xmx1024M -jar FamiliarTool-1.0.5.jar`
- [7] Go back to the FAMILIAR Tool and navigate to `Help -> Familiar Tool Quick Help`.
- [8] Close the FAMILIAR Tool.
- [9] Stop recording the video session (i.e. click on grey button), and save the video file in the folder with your name (`/home/my_user_name/FAMILIAREvaluation/yourname`) as `test.avi`.
- [10] Make sure that you can play this file, and that it recorded all steps from [4] to [7]. Delete file `test.avi`.

RUNNING FAMILIAR TOOL (GUI-BASED APPLICATION)

IMPORTANT: Before you start **each** task **START** recording, then at the end **STOP** recording. Use task names when creating video files (i.e. Task1.avi, Task2.avi, etc). Create for each task a FAMILIAR script file with the feature models and/or instructions you used and put it in `FAMILIAREvaluation/yourname/Tool` (e.g. task1.fml, task2.fml, etc). Scripts must be located in the same directory you launched FAMILIAR to work properly.

To run the FAMILIAR Tool:

```
cd FAMILIAREvaluation/yourname/Tool
java -Xmx1024M -jar ../../bin/FamiliarTool-1.0.5.jar
```

To run your script file:

Either by console: `run "TaskX.fml"`

Or by menu: Script > Run Familiar Script...

You could get some documentation about FAMILIAR at the following address:

<https://github.com/FAMILIAR-project/familiar-documentation/>

END OF THE EVALUATION

The evaluation stops after **2 hours**.

After that time, compress the directory `FAMILIAREvaluation/yourname/` and then upload it on <http://dl.free.fr> with the following email addresses: simon.urli@unice.fr and Philippe.Collet@unice.fr.

LAB TASKS

Task	Description
<p>Task0</p>	<p>Open the AUDI configurator located at the following location: http://configurator.audi.co.uk/controller?next=carline-page&mandant=accx-uk (or http://bit.ly/glzhML)</p>  <p>Take a few moment (~10 minutes) to play with the configurator and to look how it works. (You will only do this task one time for the whole experiment, however don't forget to record your actions).</p>
<p>Task1</p>	<p>In 20 minutes, create a partial feature model supporting the whole structure of the AUDI configurator.</p>
<p>Task2_X</p>	<p>Take a “model line” (e.g. Audi A1, Audi A3, etc) and create a feature model representing all the variability of the model line. Follow only the step 1 and 2: Exterior, Interior and Equipment are not required. Try to go to the essential and don't loose yourself in details. Moreover don't forget FAMILIAR only allow strings for feature names.</p>
<p>Task3_X</p>	<p>Let us play with our feature model. First, let us check some (basic) properties and better understand our specification:</p>

	<ul style="list-style-type: none"> • the feature model represents at least one valid configuration • there is no “dead” feature • features included in all configurations (core features) of the feature model should correspond to non-configurable options (e.g. steps, category, containers’ name) • there is no “false optional” feature • create some partial configurations that are actually consistent with the behavior of the configurator • create some complete configurations that are actually consistent with the behavior of the configurator
Task4	Repeat tasks 1 or 2 for each model line. Name your different files with the model name (e.g. Task1_AudiA1.fml, Task1_AudiA1.ovg, Task2_AudiA1.fml, etc)
Task5	When you finished all feature models, merge it into a single one and test the same properties of task 2. Compare the obtained feature model with the feature model of task 1. Put your conclusions in few lines in a text file.
Task6 (bonus)	As the number of configuration options can be huge, we decide to build a set of simplified feature models in order to focus only on some aspects of an Audi car. Propose and try different strategies using decomposition mechanisms.