Text-To-Speech handling in Deig

Text-to-speech (TTS) is generated by a module that can be selected in the Character menu. When Deig is started, the available modules are loaded from the classpath. Currently there are four available TTS modules (presented below) but more can be added by creating a new implementation of the Java Interface se.deig.tts.TTSInterface. You can download an Eclipse project that contains everything you need (apart from the actual TTS generator).

Available TTS modules

Deig has four implementations of the TTSInterface installed. Note that neither of these are intended to be used for anything other than prototyping and testing. If you want to publish a game using TTS you need to obtain some other TTS engine. Also, no support is given to these modules. If a module is causing problem or is not working, please just remove the corresponding jar-file from the lib-folder.

GoogleTTS

This module uses the TTS from Google Translate. It sends request via an unsupported interface so it may stop working at any time.

PC TTS

This module will only work when Deig is run on Windows. It uses the system TTS of Windows (SAPI.SpVoice). It is unsupported and may be unavailable on some versions of Windows.

OSX TTS

This module will only work when Deig is run on OSX. It uses the system TTS of OSX and can use all available languages and voices. It is unsupported and may be unavailable on some versions of OSX. You may be able to download additional voices through the system preferences.

Dummy TTS

This is not using a real TTS engine. It ignores the text and generates a wav-file that states "Text to speech is missing". It is provided for testing and it is also included in the Eclipse project discussed below.

Implementing a new TTS module

To create a new TTS you first need to download TTSService.zip from http://deig.se. This is an Eclipse project but you may use any environment to build a new jar-file that is then included in the classpath of Deig.

The project is configured to create the "Dummy TTS" presented above.

To create a new TTS module you need to do the following:
- Implement the `TTSInterface` in a class with a unique name
  - Implement the method `getTTSEngineName()` to return a unique name for your module that will be used in the GUI of Deig.
  - Implement the remaining methods (see the comments in `TTSInterface` for details)
- Update the file `META-INF->services->se.deig.tts.TTSInterface`
  - Add the full class name of your new implementation, i.e. replace `se.deig.tts.dummy.DummyTTS` with your new class.
  - Note: you should *not* change the name of the file.
- Create a jar-file that contains both the classes and the meta-information.
- Add the jar-file to the `Deig_lib`-folder.
- Update the classpath to include the new jar-file
- If you have installed Deig with the installers, you should note the following:
  - On Windows 10 `Deig_lib` is located in:
    - `C:\Users\`*username*`\AppData\Local\Deig\app`
  - On mac it `Deig_lib` located in:
    - `/Applications/Deig.app/Contents/Java`
  - Add the jar-file to the classpath by updating the file `Deig.cfg` (located in the same folder). Add it on the line `app.classpath=`
- If everything has been correctly, your new TTS module will now be listed in the menu `Characters->TTS Generators`

Comments

If you have any comments or questions you may mail me at henrik@deig.se and I will try to assist. If you create a new module (for example to Linux), you are welcome to share it with me. I may then add it to the distribution.