MatlabMode

What it is

A major mode for editing .m-files containing Matlab code. Matlab is proprietary software for numerical maths and data analysis. Also note that Emacs (21.3 onwards) comes with an alternative built in: octave mode. Octave is a free software alternative to Matlab.

How To Use It

Put into your init-file (~/.emacs, ~/.xemacs/init.el, whatever)

```
(autoload 'matlab-mode "matlab" "Matlab Editing Mode" t)
(add-to-list
 'auto-mode-alist
 '("\\.m$" . matlab-mode))
(setq matlab-indent-function t)
(setq matlab-shell-command "matlab")
```

On Win32

MATLAB is not a CLI application on MS Windows. One needs a shell wrapper that would pipe emacs input into a Matlab and back. One can get that from http://www.cs.umb.edu/~ram/matlabShell/index.html . The only problem is that it does not allow multiline commands. This is crucial if one intends to use it with org-babel . There is a workaround available until better solution is found. Here it is explained how to set things up. However `""` shall be replaced with `'()`

Here is mine `C:/Programs/matlabshell/matlabshell.cmd`

```
@echo off
SET PATH=C:\PROGRA~1\MATLAB\R2011a\bin
%~dp0\matlabShell.exe 10000 20000
```

And here is what I have in dot emacs

```
(setq matlab-shell-command "c:/Programs/matlabshell/matlabshell.cmd")
(setq matlab-shell-command-switches '())
(setq matlab-shell-echoes nil)
```

On Mac

Matlab on Mac is accessible as a CLI application on Mac (and maybe Linux)
with settings similar to the following:

```
% CLI matlab from the shell:
% /Applications/MATLAB_R2016a.app/bin/matlab -nodesktop
%
% elisp setup for matlab-mode:
(setq matlab-shell-command "/Applications/MATLAB_R2016a.app/bin/matlab")
(setq matlab-shell-command-switches (list "-nodesktop"))
```

Wiki Pages

- MatlabFunctionTemplate

Links

- GNU Octave: http://www.octave.org/
- The Math-Works Website: http://www.mathworks.com/
- Download matlab.el:
  http://www.mathworks.com/matlabcentral/fileexchange/loadFile.do?
  objectId=104&objectType=file

- SourceForge project for matlab.el (and CVS): http://matlab-emacs.sf.net. the tarball link: http://matlab-emacs.cvs.sourceforge.net/viewvc/matlab-emacs/?view=tar
- A how-to by Cristian S. Dima: http://www.andrew.cmu.edu/course/16-720/extras/matlab_in_emacs/

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