Lesim-Mode: Edit Learning Simulator Scripts in Emacs

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1 Introduction

Lesim-Mode is an Emacs major mode to write and run Learning Simulator scripts. Its features are:

- Syntax highlighting.

- Align parameter blocks at the = sign.[1]

- Align phase lines within a phase block at | signs.

- Highlight misspelled stimuli, behaviors, and line names in phase blocks.

- Handy movement by field in phase blocks.

- Insert script template.

- Run scripts through the Learning Simulator.

Lesim-Mode does not understand the full Learning Simulator syntax. That is a job for Superman, that is, Learning Simulator chief software architect Markus Jonsson.

2 Installation

Install from here for now, hopefully from MELPA later.

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[1]The earlier Learning Simulator syntax using : for assignments is not supported by Lesim-Mode.

Figure 1: Sample screenshot

3 Quick start

- Syntax coloring is enabled automatically. It also highlights some errors, line unassigned parameters.

- Press `TAB` anywhere in the buffer. This has different actions depending on context:

    - In a parameter block, it aligns the block.
    - In a phase block, it aligns the block, highlights misspelled stimulus elements, behaviors, and phase line names, and moves to the next field.
    - Everywhere else, it has currently no effect.

- Press `C-c r` to run the script in the Learning Simulator (see 5).

- Press `C-c t` to insert a template to get started on a script (see 5).

4 Learning Simulator

You can learn about the Learning Simulator from these sources:

- The Learning Simulator Website

- Learning Simulator documentation on Read The Docs

- Short article in the Journal of Open Source Software

5   Configuration

Using `M-x customize-group lesim` you can configure:

- The command used to run the Learning Simulator (default: `lesim.py`).

- The key binding to run scripts (default: `C-c r`).

- The key binding to insert a template script (default: `C-c p`).

- Whether to insert a template script automatically upon opening an empty `.les` file (default: `nil`).

- Other minor items explained in the customization buffer.

6   Planned features

- Look up parameter definitions in the online docs.

- Use online docs to set default parameter values.

- Parse assignments to highlight syntax and content errors.

- Highlight and validate plotting commands.

- Add Lesim menu.

Please suggests features as issues on Github.

7   Bugs

- Error links in compilation mode point to the wrong file.

Please report bugs as issues on Github.