# Markov Chain Algorithm application

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| --- | --- |
| Input text field:  - type or paste text  - file chooser  - file drag-and-drop  - etc.   | Output text field:  - read-only  - allow select/copy  - allow saving to file   |

3

Prefix length (in words):

1

10

Output length (in words):

1000

1

500

Generate

User story:

* The user enters input text in the input field, to be used to generate a Markov chain model. This text can come from direct input or from the contents of a file.
* Using the two configuration sliders, the user would then choose a prefix length for the Markov chain model, and the number of words of output to generate.
* When the Generate button is clicked, the input model, prefix length, and output length are submitted to the server (e.g. via form submit, or via AJAX).
* The response from the server will contain a new sample of text generated from the input model. They are shown side by side for the sake of comparison. The user would have the option of copying or saving the output.
* The user then has the options of re-editing the input text and parameters and regenerating the output text.

It would be possible for such an application to detect whether the input text and prefix length parameter have changed in a particular session. If neither has changed, the text model would not need to be regenerated or even resubmitted; this may be a consideration if performance is likely to be an issue, e.g. given long input text, or with a slow or congested server.

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