

# Randomness Final Project Proposal: Text Auto-Suggestion

Jorge de la Torre, Cole Dumas, Colin Martin,  
Dylan Leddy & Matthew Murno

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## 1 Introduction

Modern text auto-complete algorithms utilize Markov chains to suggest future text based on what was previously written. You can feed a large number of text to such an algorithm and it will process the probability of one letter coming after another, or certain words coming after other words. We are aiming to harness this power in our own auto-complete algorithm for this final project.

## 2 Objectives

We aim to create a web application where the user will be able to type and receive suggestions for word and sentence completion. The algorithm will generate probabilities of linguistic patterns occurring based on source text. We will implement a back-end in Python and a JavaScript/HTML/CSS front end.

## 3 Division of Work

- Austin: Python Lead Engineer, Linear Algebra understudy, Database manager
- Matt: Front end designer, Tester, Web scraper, Assistant to the assistant to the database manager
- Cole: Team leader, Python developer, Janitorial work
- Dylan: Python developer, Linear Algebra secondary consultant, Assistant to the database manager.
- Colin: Assistant to Team Leader, Python developer, Linear Algebra consultant, Water-boy

## 4 Tools

- Python
- JavaScript
- Linear Algebra
- GitHub
- Scrappy attitude