# Disjoint Union Types in P0 Project 9 / Group 8

Jason Balaci

McMaster University

April 2021

- 1 Objective & Implementation
- 2 Examples
- Implementation Evaluation and Notes
- 4 Future Work

- Objective & Implementation
- 2 Examples
- Implementation Evaluation and Notes
- 4 Future Work

## What are Disjoint Union Types?

This is a text in the first frame. This is a text in the first frame. This is a text in the first frame.

## How were they implemented?

## **Grammar Changes**

- Objective & Implementation
- 2 Examples
- 3 Implementation Evaluation and Note
- 4 Future Work

## Example: Maybe & Either

## Example: Lists

## Example: Strings

- Objective & Implementation
- 2 Examples
- Implementation Evaluation and Notes
- 4 Future Work

## Memory Impact & Management

Each instance of an ADT is located on the heap, and instances of local/global ADTs are pointers to the locations of their corresponding ADT on the heap.

## Design Decisions

#### Notes on Runtimes

- Objective & Implementation
- 2 Examples
- Implementation Evaluation and Note
- 4 Future Work

## Better Memory Management

#### More Built-ins

#### References