# CS 136
.RKT IN C

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## Table of Contents

## Future Modifications

# 1  Introduction

Lab: MC 3027, 10am-6 _____ Add intro

# 2  Modularization

**Definition 2.1.** A **module** is a collection of functions that share a common aspect or purpose. **Modularization** is dividing programs into modules.

- Reusability

- Maintainability

- Abstraction

**Definition 2.2. provide** is used in a module to specify the identifiers availabie in the module.

fun.rkt

```
1  (provide fun?) ;Allows use of function outside of program
2  (define lofn '(-3 7 42 136 1337 4010 8675309))
3  ;; (fun? n) determines if n is a fun integer
4  ;; fun?: Int -> Bool
5  (define (fun? n)
6    (not (false? (member n lofn)))))
```

**Definition 2.3. require** is used to identify a module that the current program depends on.

implementation.rkt

```
1  (require "fun.rkt")
2  ;;Able to use provided functions in required file
3  (fun? 7) ; => #t
4  (fun? -7) ; => #f
```

## 2.1  Scope

- **Local:** Visible only in local region

- **Module:** Only visible in the module it is defined in

- **Program:** Visible outside the module.

> **Quote. require** also outputs the final value of any of the top-level expressions in the module. Only definitions should be included in modules.