**Contacts Management**

Jake Willson

Victor Ramos

Kevin Merwin

* Program that can add, remove, display or edit locally stored contacts, comparable to cell phone contacts.
* Contact could be a struct that has name/number/email/address etc.
* Authentication
  + Encrypted
    - RSA
  + Store all usernames and passwords in login.txt
* Print to file (save or commit)
* Persistant storage of accounts
  + Directory

Structs/Union/Enum

* Dynamic **Array[Contact**] typedef
  + -> phone#, email, name … -> next
* Dynamic **Array[Account**] typedef
  + Account.txt with [user1] – [password1] : has all accounts
  + [user1].txt : has all contacts
  + Filename is created and read based on username and is always predictable
* **Account** struct
* **Contact** struct
* **“Search”** (\*through contact data\*) Union
  + user can enter char \* for name
  + user can enter long for phone number
* **Command** Enum
  + ADD / REMOVE / DISPLAY / **SEARCH** (Create VCard for account option)
* **Run-time state** Enum
  + Determines run time state
    - Authentication state
    - User’s contact state

Libraries

* Studio.h
* Studio.io
* String.h
  + Strstr() can check if contact data is contained within search

Any changed data to user’s account OR user’s contacts will be written to the file after program terminates. Authentication file is opened in every session and an individual user file is selected, which is opened and closed exactly once.

The accounts.txt file determines the user’s contact file

* The user’s contact file is written to and read from exactly once

**VCARDS** parsed in and out