

COP 3330 Final Project

Summer 2012

UCF Converse:

The EECS department has contracted you to create a chat service using the concepts of Object Oriented Programming, such that it may be an easy to maintain and enhance the application.

Requirements:

- 60 pts – Textual (command line) version of the program, after this is build one can create a wrapper around it and create an interface on any platform.
- 20 pts – Proper documentation (see task schedule bellow), this includes Javadocs, code comments when needed, and a User Manual
- 20 pts – Prompted UML diagrams, this includes Use Case, Class Diagrams, and an Activity Diagram showing how the information flows at an architectural level
- Optional: graphical user interface, +20 pts in project grade, if program is at least fairly working (some bugs are permitted)

Organization:

- UserAccount – holds the Contact information of the user, along with its type (student, faculty, staff)
- Contact – contains basic contact information about the user. Among the information one can find, the PID, firstName, lastName, year, and program (e.g. CS, IT, CpE, EE, etc.)
- ContactList – a collection of contacts, known to the UserAccount
- SpecialList – a ContactList that contains elements from a given category only, such as: CourseList, FavoritesList, InstructorsList, SeniorList, JuniorList, SophomoreList, FreshmenList, etc. Hence, a way to distinguish them is needed, for example a String name or enum Category, so forth
- Message – contains a String with the message being sent, and the source and destination Contacts of such message
- MessageLog – has a backup of the messages sent by users, must have two timestamps (e.g. GregorianCalendar), indicating the time interval that it covers. The MessageLog is stored on the ConverseDB, as well as optionally on the local machine in a file
- CommunicationChannel – an interface to send and receive information (will cover more on this when the final phase approaches)
- ConverseDB – a collection containing all UserAccount in the system, along with MessageLog created

Phases of the Project:

The project has been divided into phases, on a schedule from M-F working days, as follows:

<input type="checkbox"/> UCF Converse	30 days?	Mon 6/25/12	Fri 8/3/12	
Specifications	1 day?	Mon 6/25/12	Mon 6/25/12	
<input type="checkbox"/> Design	8 days?	Mon 6/25/12	Wed 7/4/12	
Use Case Diagram	1 day?	Mon 6/25/12	Mon 6/25/12	
Class Diagram	8 days?	Mon 6/25/12	Wed 7/4/12	
<input type="checkbox"/> Implementation	28 days?	Mon 6/25/12	Wed 8/1/12	
Define class prototypes	6 days?	Wed 7/4/12	Wed 7/11/12	
Identify collections to be used	6 days?	Wed 7/4/12	Wed 7/11/12	
Incorporate collections into proper classes	8 days?	Thu 7/12/12	Mon 7/23/12	7,8
Create empty threads for communications	1 day?	Fri 7/20/12	Fri 7/20/12	
Establish communication	1 day?	Mon 7/23/12	Mon 7/23/12	10
Add contact to list	7 days?	Tue 7/24/12	Wed 8/1/12	11
Populate contact list	7 days?	Tue 7/24/12	Wed 8/1/12	11
Create and edit special lists	7 days?	Tue 7/24/12	Wed 8/1/12	11
Send message	7 days?	Tue 7/24/12	Wed 8/1/12	11
Receive message	7 days?	Tue 7/24/12	Wed 8/1/12	11
Optional GUI	28 days?	Mon 6/25/12	Wed 8/1/12	
<input type="checkbox"/> Testing	28 days?	Mon 6/25/12	Wed 8/1/12	
Run unit tests	28 days?	Mon 6/25/12	Wed 8/1/12	
Check test cases	28 days?	Mon 6/25/12	Wed 8/1/12	
<input type="checkbox"/> Finilize	30 days?	Mon 6/25/12	Fri 8/3/12	
<input type="checkbox"/> Documentation	30 days?	Mon 6/25/12	Fri 8/3/12	
Javadoc	30 days?	Mon 6/25/12	Fri 8/3/12	
Comments	30 days?	Mon 6/25/12	Fri 8/3/12	
User manual	30 days?	Mon 6/25/12	Fri 8/3/12	
Submit Project (Final Project Due)	30 days?	Mon 6/25/12	Fri 8/3/12	

Program Use Cases:

