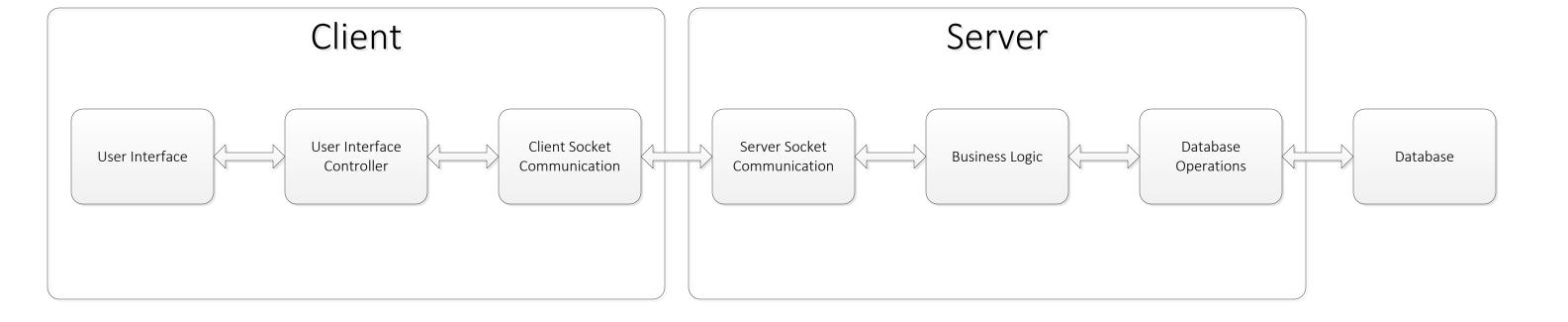
ACS 560 Software Engineering

HW 6 (Due on Oct. 8, 6pm in class)

There is no homework this week. However, you and your project team member(s) need to work together on your course project on system design using UML. Specifically,

- (1) List the major modules of your project and the connection between them.
- (2) Use Class Diagrams to show the main classes and the relationships between them. There should be two class diagrams: one for client side and the other for server side.
- (3) Use Sequence Diagrams to show the workflow for your project.
- (4) If you think other UML diagrams (such as activity diagrams or use case diagrams) are more proper for your project, please feel free to apply these UML diagrams.
- (5) Upload the initial version of your design document to your GitHub under the repository acs560_course_project.
- (6) Prepare a short presentation to present the system design of your project on the next class (Oct. 8). The presentation is limited to 5 to 10 minutes.

Please submit both soft copy and hard copy with your system design to the instructor. Please send the soft copy to zchen@engr.ipfw.edu. Please hand in the hard copy right before the class on Oct. 8.



Todd Welch Yeisol Woo

Class Diagram: Server Date: October 4, 2013

Server -port : int -serverSocket : ServerSocket +main() : void +session(in socket : Socket) : void

Friend

-user_name : string -first name : string -last_name : string

+Friend(in user_name : string, in first_name : string, in last_name : string)

+getUserName(): string +getFirstName() : string +getLastName(): string

+setUserName(in user_name : string) : void +setFirstName(in first_name : string) : void +setLastName(in last_name : string) : void

Session

-socket : Socket

+Session(in socket : Socket)

+start(): void

+authenticate(in user_name : string, in password : string) : bool +getMessages(in user_name : string) : ArrayList < Message >

+sendMessages(in messages : ArrayList < Message >) : void

+saveMessage(in message : Message) : void

+deleteMessage(in user_name : string, in message_id : string) : void +deleteAllMessages(in user_name : string) : void +getFriends(in user_name : string) : ArrayList <Friend>

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+sendFriends(in friends : ArrayList <Friend>) : void

DB_Operations

+insertMessage(in message : Message) : void +getMessages(in user_name : string) : ArrayList <Message> +deleteMessage(in user_name : string, in message_id : int) : void

+deleteAllMessages(in user_name : string) : void

Message

-sender : string -recipient : string time : int -message : string -message_id : int

-location : GPS_Coordinate +Message(in sender: string, in recipient: string, in time: int, in message: string, in message_id: int, in location: GPS_Coordinate)

+getSender(): string +getRecipient() : string +getTime(): int

+getTimeFormatted(): string +getMessage(): string +getMessageID(): int +getLocation() : GPS_Coordinate

+setSender(in sender : string) : void +setRecipient(in recipient : string) : void +setTime(in time : int) : void +setMessage(in message : string) : void +setMessageID(in message_id : int) : void +setLocation(in location : GPS_Coordinate) : void

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-latitude : float -longitude : float

+GPS_Coordinate(in latitude : float, in longitude : float) +getLatitude() : float

+getLongitude() : float

+setLatitude(in latitude : float, in longitude : float) : void

+setLongitude() : void

GPS_Coordinate

