**ITC303 – Team Orange E3 Iteration Plan**

# **1. Iteration summary and comments**

**Summary**  
Larger efforts were made to get an understanding of the Model View Controller pattern, Lambda expressions and Event Handling to enable further development of functionality into the core GUI of the application.

**Demonstrated functionality include:**

* User Presence notification.
* Request to add a user as a contact.
* Accept/Decline a contact add request.
* View contacts when logging in.
* Start/Open a chat with a contact.
* Engage in a chat with a contact.

**Comments Shaun**

Additional complexity and larger learning curve was found with Model View Controller Model, using Lambda expressions for event handling and the xmpp implementation components. The iteration was large spent researching and understanding these complexities. I am now have an understanding of these components and am able to implement functionality as demonstrated in item 2.

**Comments Tim**

Chat GUI has been built and is functional.  
List of Chats GUI has been built, but was implemented as a list of contacts instead, with each contact being associated with only a single chat, which can be opened/created by clicking the chat button next to that contact.  
Debug Babbler “add contact” and “get contacts” bug. There was a bug with the adding and retrieving of contacts; Shaun and i have debugged it and now adding a contact works, and retrieving contacts works, except there is still a bug where once that contact logs in, they are no longer retrieved in your contacts. See work item 7.1 for further details.

**Comments Murray**

# **2. High Level Objectives/Milestones**

|  |  |  |
| --- | --- | --- |
| **ID** | **Objectives** | **Date** |
| - | Iteration start | 08/05/2017 |
| 1 | Users can send a contact request and accept or reject request. | 15/05/2017 |
| 2 | User can manage and view contact presence. | 15/05/2017 |
|  |  |  |
| 3 | Storing & retrieving info from server (Chats, Messages) | 15/05/2017 |
| 4 | Message integrity | 15/05/2017 |
|  |  |  |
| 5 | List of chats GUI | 21/05/2017 |
| 6 | Chat GUI | 21/05/2017 |
|  |  |  |
| 7 | Debug Babbler “add contact” and “get contacts” bug. | 21/05/2017 |
|  |  |  |
| 8 | Investigate data persistence on client | 21/05/2017 |
|  |  |  |
| - | Iteration End | 21/05/2017 |
| 8 | Review Iteration | 21/05/2017 |

# **3. Work Item assignments**

The following Work Items will be undertaken in this iteration to complete the above listed Milestones:

**GREEN**  = Complete  
**YELLOW**  = Mostly complete, some complications  
**RED**  = Aborted

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| **ID** | **Work Items** | **Measure** | **Outcome** | **Assigned** | **Completion Date** | **Hours worked** |
| **Shaun** | | | | | | |
| 1.1 | Implement function to allow a user to send a contact request to another user. | Request is send to user and notifies client device. | Not completed, will defer to construction phase. | Shaun | 15/05/2017 |  |
| 1.2 | Implement GUI features to send request. | Dialogue created to send a contact request. |  | Shaun | 15/05/2017 |  |
| 1.3 | Implement function to allow a user to accept or reject a contact request. | Contact request is responded back to requesting user with permissions for contact. |  | Shaun | 15/05/2017 |  |
| 1.4 | Implement GUI features to accept or reject a contact request. | User notified of contact request, dialogue to accept or reject request. |  | Shaun | 15/05/2017 |  |
| 1.5 | Implement Test Script 4.1, 4.2 and 4.3. | Test outputs results to console. |  | Shaun | 15/05/2017 |  |
| 1.6 | Update TestPlan4 Doc and iteration plan with evidence. | Doc updated |  | Shaun | 15/05/2017 |  |
| 2.1 | Implement functionality to view presense of users. | Notified of status of users presence. | Completed see branch, [E3-feature-presence](https://github.com/csuproject/instantmessenger/tree/E3-feature-presence). | Shaun | 15/05/2017 | 12 |
| 2.2 | Implement GUI features to add(contact request) and remove contacts. | Dialogue to manage contacts. | Tim Completed in item 5.5. | Shaun | 15/05/2017 |  |
| 2.3 | Implement GUI features to display a list of contacts. | List of contacts displayed. | Not completed, will defer to construction phase. | Shaun | 15/05/2017 |  |
| 2.4 | Implement GUI features to view user's presence in contact list. | Presence displayed in contacts list. | Not completed, will defer to construction phase. | Shaun | 15/05/2017 |  |
| 2.5 | Implement Test Script 4..4. | Test outputs results to console. | Not completed, will defer to construction phase. | Shaun | 15/05/2017 |  |
| 2.6 | Update TestPlan4 Doc and iteration plan with evidence. | Doc updated | Not completed, will defer to construction phase. | Shaun | 15/05/2017 |  |
| **Murray** | | | | | | |
| 8.1 | Examine XMPP options for offline storage of messages | Read through documentation on XEP implementation (XEP = XMPP feature) noting support from the API in use (Babbler) | Babbler does support a number of XEPs relating to this feature, specifically XEP222/223 and 013. Current understanding is these options still require retrieval from server when you can next connect | Murray | 21/05/17 | 1 |
| 8.2 | Investigate offline storage of messages on the client. | Examine other XMPP clients to disover the technology used | Other clients are using an embedded database as the means to store chats, chatrooms etc when not connected. | Murray | 20/05/17 | 3 |
| 8.3 | Prepare whitepaper on database options for storing offline data | Created document for review by team. SQLite database with Java engine/API looks like the best option | Document: [Chat Data Persistence in Confide instant messenger](https://drive.google.com/open?id=1Vdm6giIpH432sD91qJ3-ZMKoyoapmAzF2R0aBGaUHvE) created | Murray | 20/05/17 | 5 |
| 8.4 | Update documentation in preparation for E3/LCAM | Begin updating various documents for E3/LCAM submission | Documents stored in [E3](https://drive.google.com/open?id=0B1DmsFWlqdTyWE5GbGtFRm82cEE)/[LCAM](https://drive.google.com/open?id=0B_ZxlBCSPtOJWF9VYUYxVkFvbzQ) folder | Murray | 19/05/17 | 2 |
|  |  |  |  |  |  |  |
| **Tim** | | | | | | |
| 5.1 | Create a list of chats on the homescreen | A list of chats exists on the homescreen. | A list of contacts is on the homescreen, each of which is related to one chat. | Tim | 21/05/2017 | 2 |
| 5.2 | Load in all current chats to the list | The gui can load in chats. | Complete. Gui can load contacts which represent chats. | Tim | 21/05/2017 | 2 |
| 5.3 | Update list of chats GUI when chats are created or deleted | GUI is updated on chat events. | Complete. | Tim | 21/05/2017 | 1 |
| 5.4 | Provide a button on each chat in the list which allows the user to enter (view and interact with in chat screen) that chat. | Users can select a chat to open it. | Complete. Users can select a contact and open the associated chat. | Tim | 21/05/2017 | 1 |
| 5.5 | Add Contact GUI | User can type another user’s name, press add, and a contact request will be sent to them. | Complete. | Tim | 21/05/2017 | 2 |
| 5.6 | Contact request Accept/Decline. | User receives a contact request in their contact list GUI when they receive a contact request, and can accept or decline it. | Complete | Tim | 21/05/2017 | 3 |
| 5.7 | Retrieve and load roster on startup. | When a user logs in, they can see all their contacts, as they are loaded in. | Mechanism is complete. Still some bugs though. See 7.1 | Tim | 21/05/2017 | 3 |
| 6.1 | Chat GUI displays messages when they are sent or received. | Chat GUI can display messages, and is updated on message events. | Complete. | Tim | 21/05/2017 | 2 |
| 6.2 | Chat GUI can send messages. | User can type a message and press send, and it will be sent. | Complete. | Tim | 21/05/2017 | 1 |
| **Multiple People** | | | | | | |
| 7.1 | Debug Babbler add contact and get contacts bug. | Adding a contact does add the contact (as seen in web console), however when retrieving the list of contacts, the list is empty. But when retrieving the contacts list for “usera” which was created in another iteration, this function works. | Discovered that it works when you put a break point before each statement, running it more slowly. Then once it worked once, running it at normal speed works. Spinning while waiting for the XmppClient status to be AUTHENTICATED fixed the issue without debugging. But then it started having problems as well.  Further inspection discovered that if one user adds a contact, they will get that contact back when requesting their contacts, every time, until that other user logs in, then it will stop working. | Tim and Shaun | 21/05/2017 | 4 each |