ShoutAut is a wifi fenced location\* based chatting board. It is secure and private or open depending on the location's wifi settings. It is for broadcasting, communicating and connecting to the out of network people where ever we are.

(\*There is a key difference between location and places. In this document, when I say location, I generally mean places. The places have greater context. The wifi gambit enables the context more for us. Also, please keep the wifi and the APs (access points) fencing aspects of ShoutAut in stealth and not disclose.)

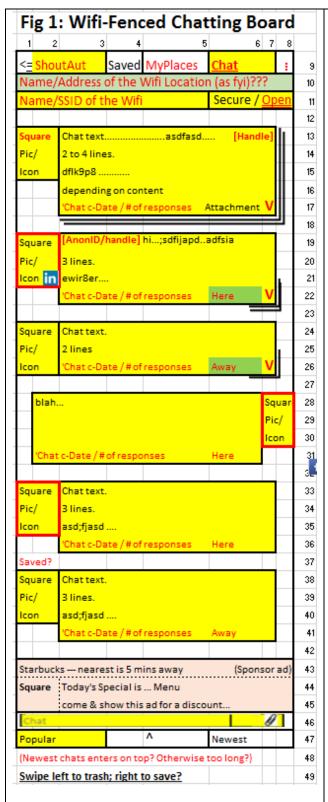
## The problem we are solving and brief overview:

- 1) No one has solved the location based messaging yet. (Said an expert in location space.)
  - a) There is no app-tool for out-of-network communication or connecting with other people there based on where you are. (And you are always where you are.)
    - i) Above is loosely true. There are Firechat (wifi based peer to peer chat over BLE), and few others. We start with chat, later perhaps one-to-one messaging (possibly encrypted).
    - ii) If I would qualify the above with "the <u>place</u> where you are" I think it is truer statement, meaning not just a radius, but our inferred fencing.
    - iii) (No one has used wifi as a fence for determining the location's fence. This I believe is true. Plus, treating the people there as some sort of community.)
- 2) No one has solved the "community connecting" based on location (at least with "out of network" people) either for the regulars (employees; campus; co-working space members) or adhoc (Starbucks; guests at hacker dojo or google meetup). Hmm, I think this is a true statement at least as a general statement. (The thing that ShoutAut is trying to be is that we are focused on location then providing a general communication channel, whereas most or all chats/messaging apps have the location as a feature.)
  - a) A possibility (?): Google complex employees will use ShoutAut as an out of network "ad hoc" channel to communicate. They know that it is secure. (I hope we can figure out how to credential them with their secure wifi WITHOUT asking them to enter their id/password to the wifi into our app.)
- 3) Replacement for the physical bulletin boards? Not quite, especially since we are now stripped down to Chats. (As we are not doing/deferring the individual Boards and Postings.) But, I think we are addressing a meaningful part of this need and behavior.
  - a) The bulletin boards are what: A tool for broadcasting, communicating and connecting with out of network location based people.
  - b) However more importantly: We are also extending it as IMO a must have of digital tools is that it ought to do things we can't readily do in physical (i.e. to extend).

Thus broadly, there is a gap in the communication tools available to us – the out of network people at location and places - this communication gap is the mission of ShoutAut.

- 4) BTW: We have to decide if ShoutAut is a "social" or a tools/productivity app. I am not sure. This will affect some of the features and functions. I wonder if we can say: Focus the functions on being tool/productivity app, but to have social features as well. <<MC: Opinions welcome. >>
  - Productivity Functions: Allow users to post and exchange files. Allow/encourage users to use a personal profile (e.g. LinkedIn).
  - Social Features: Anonymous? The graphics of the UI are mo' fun/informal?
- 5) Our initial target group demographics are i.e.: The Persona to "visualize" when building the beta-MVP for: are college students\* (even if majority use iPhones). In general, our target users have two characteristics: The users are regulars at places and which has a large group/members size. So that, they use it frequently and have need to communicate or connect with out of network others. (\*High School students are a good secondary target. But, it seems that less than 50% have school wide wifi. THUS! For those that do we can infer and extend the geofence of the "weak" wifi/APs throughout the school, thus students have a way to exchange files through our system. "...some middle school students walk around the room with laptops to get wifi signals...to download homework..."
- 6) Some more of me selling this project (to Meera)...;P

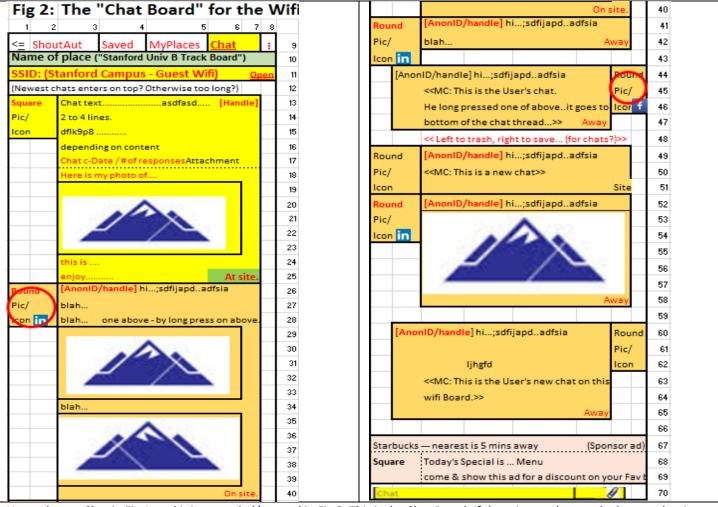
- a) ShoutAut is a gambit to fill the gap in our communication channels. With the addition of wifi-inferred-fencing, we potentially have a powerful flanking maneuver on the "location based messaging" (Experts say that location based messaging has not been solved yet; this can be big part of that.) There is both a "natural" and organic way to infer a fence (from café to college campus to citywide (later)) and there is a "natural" pre-existing community. (No one has solved the location specific community connection. We might be. (BTW: I was thinking to start this with anonymous for all. However, we can consider to add a feature in F4 (Post Chat) to allow users to add a handle. We are encouraging them to add their pic after all, and this is somewhat of a community.)
- b) What we are building has to have potential to go viral to 50 to 100 million users in 3 years. Otherwise, the VCs don't want to bother.
- c) Wifi based mesh is cool. But, not practical as a general location based communication.
- d) <<ShoutAut.com or Wiefi.com or WiChats.com or WiBoards.com (Which is better?)>>
- 7) General questions and things to still decide on also more are listed in each of the respective sections.
  - a) Do the Map at all?
    - i) <u>Yes</u>: It's useful. And it nice to have something graphic (anything!) with our app. And the use of functional information" graphic map as opposed to overlaying on top of a regular map is novel and cool.
    - ii) No: Takes extra team resources. Not mission critical.
    - iii) And, should the Map tab be in the 3 dots (box 8) or at box 4 (and move Save to the 3 dots (box 8).
  - b) Make (Fig 4) only anonymous or just the write-in handle or anonymous option, and no LinkedIn?
    - i) LinkedIn
      - (1) Do it: It's useful. Users want to know who is who, and at trade shows, meetups, it's useful and efficient.
      - (2) Don't:
        - (a) Easier on the team we don't have to figure out LinkedIn APIs, and build additional processes.
        - (b) College kids and younger it's subliminally says: This app is for "grownups". And I doubt, they want to use their FB, or other social some may, but...
        - (c) At tradeshows, Dojo; users can add their contact information into the Chat itself.
        - (d) Later: We can take keywords from their LinkedIn (or user's profile that they give to ShoutAut) and load Chats related to that topic. Sort of like "conversation clipping/eavesdropping service".
    - ii) Anonymous or/and Write-in:
      - (1) Yes: I think we at least ought to allow them to write in a handle. Self-expression. Users want to know.
      - (2) No: Make it simple!
        - (a) The system just generates a handle for the user. Don't even have the line 20/21 at Fig 4. We come up with some algorithm for their handle. And we can allow LinkedIn, etc. later.
    - iii) Perhaps the best for us for now is: We allow them to upload a picture or image images can tell a lot about the user and to allow a handle or system generated anonymous ID. (I.e. no LinkedIn for now)
  - c) How long to keep the Chats up? For now, it is indeterminate. We revisit this and decide later....
  - d) MyPlaces and MySaves are bit redundant. But, keep both?
    - i) Yes. The MySaves allow user to save a Chat Thread.
  - e) Do we allow edits or delete to a Chat by the composer after he presses "Done". (It's done at MyChats)
    - i) Yes. Until another user(s) chat on his Chat.
    - ii) No. Once done is done.
    - iii) Yes, allow delete.
      - (1) But, cool to show (it greyed) to only the other users who posted a chat on his Chat. New users will not see it.
      - (2) Or, delete it: **But, show a single line with his handle (and pic if any?) and say "Deleted by user"**; and the thread (if any) stays.
    - iv) What about edits? What if a long thread?
      - (1) Simplest is to allow delete per above, but no edits. They can repost the Chat.
  - f) How can we know if the Wifi is secure or open? And if the user is on or not without asking them to enter their credentials into our UI other than seeing the wifi then want and to click on it. Thus, if they are not on and if the wifi is secure or requires Terms of Service acceptance they have to leave the ShoutAut and go to the wifi log on process, and then come back. (Not a great user experience. We need to make it easier, and ideally they don't leave the app. But, if they do have to leave it, after they are done, they can come right back to the app where they left off and continue.



Secure: Means either individual id/password or a group/guest id/password is needed to access the wifi. Open: No password. But often Terms of service need to be clicked.

This is the landing page. This shows the chats for the zone that the user is in. He is either: in an inferred fenced zone – and he is either recognized by the system or not; or out of any zone. (Def: Inferred means that the system has drawn a fence, and also to fill in gaps in the wifi APs to make the fence – slightly larger and filled in, so that if the user is on a campus, but far from any APs, he is still considered to be in that zone).

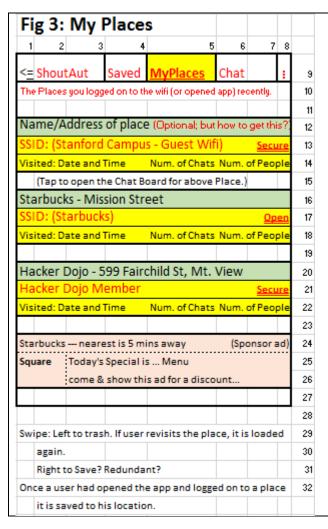
- 1) If no Chats in the wifi zone, then we display: "You can chat at the above Chat tab..."
- 2) If the user is in the wifi zone and there are Chats, we display here.
- 3) Box 2: ShoutAut is the Home (we can highlight to indicate that the user is at this View? Or not need?)
- 4) Box 4: Goes to F6. (Saves or MySaves)
- 5) Box 5: to F 3. (Places or MyPlaces?)
- 6) Box 6: Goes to F4. To compose chat. He must be able to access a wifi zone (if new wifi) or be inside inferred zone and logged on (or previously credentialed and system knows that.)
- 7) Box 8: MySaves, MyChats (his own to edit or not), etc.
- S) Line10: Very nice to have: But, I don't know how we can get this information/and how accurate. But if doing, to be filled in by ShoutAut system. Or for MVP, we don't do? (They are green highlighted in this document.)
- 9) Line 11: The name of SSID; and if that wifi is Secure or Open.
- 10) Line 13: These are the Chats for that zone, composed at F4. There are no threads here. They press Chat at Box 6 or line 46 for F4.
- 11) I think we show maximum of 4 lines for the Chat plus the Line 17.
- 12) Line 13, Box 1: The first Chat image area is framed in square, even if the image inside is round.
- 13) The <u>red boarder</u> around the image means that that Chat poster is on the site now. Diego, you can think of other ways. Its round for Chatters in Fig 2.
- 14) Line 22: "Here" means that the user was on zone at the time of composing.
- 15) L13: We can put the handle here or at the beginning of Chat (L19)
- 16) Line 17: Chat created date and time; # of chats in thread (from F2)
- 17) Line 17: Attachment or the paper clip icon is shown IF, there are attachments. (Attachments are different than the Insert per/F4)
- 18) The V or the extra lines indicate that, that chat has more chats. Double is high and single is medium, none means no other chats. Use either the V or the lines.
- 19) Line 43: We can have sponsored ads.
- 20) Line 46. I think it is useful to have this Chat at the bottom as well. It goes to F4. It may be redundant to Chat in Box 6. (Not sure). But we want to encourage people to Chat. It is bit of tight fit with the Line 47 though.
- 21) Line 47: The default sort is Popular. The ^ indicates that this navi is hidden (to increase viewing area of the screen) when user is scrolling and viewing. It can appear for 3 seconds when scrolling stops and then disappear. (That is what Waze does it is very good to study Waze UI and UX quite good. We could model our UI and some of the UX processes with Waze as "inspiration"
- 22) I prefer to have gaps between the Chats.
- 23) Line 28 is the user's own Chat.



User selects a Chat in Fig 1, and it is expanded/opened in Fig 2. This is the Chat Board. If there is no others, only the one chat is shown. (But the user is given a visual indication at F 1 if there are attachments, or other chats.) This is where he can do a "response" or "reply" chat to the subject chat.

- 24) IMPORTANT: Chat tab (Box 6 and Line 70) will open the Fig 4. BUT! The chat is posted to Fig 2, not to Fig 1.
- 25) Line 10: <<MC: Ted and Stefano!>> It would be VERY NICE to show this. But, don't know if we readily can do, and its accuracy. If not, we have to remove this in all the images. (The green highlight)
- 26) Line 11 is the SSID it's from Fig 1. Line 11. Line 12: a Gap.
- 27) Box 2/Line 13: The image is square framed as it is the first Chat. Even if the picture is round.
- 28) Line 13 and Line 26. Not sure where the best spot is for their handle. <<MC: Diego?>>
- 29) Line 13-25: is the full Chat (from F1, Line 13-17).
- 30) Line 17 (same as F1): Not sure where to put this line. At current spot, it is in the middle of the Chat. <<MC: Diego?>> We could put it at the top of the Chat, above line 13?
- 31) Line 19. There are two ways for users to insert or attach. Insert goes into the Chat for now, one object per line; and I am thinking one standard size let's do the Golden Ratio of 1 (height) and 1.612 (width) for the frame, regardless of the dimension of the object (pic, video, or file and if file, do a thumbnail image of it? But for beta, only allow photos?>>. Attach is to share the object for download by others. <<MC: Long press on an inserted object to download and save it?>>
- 32) Line 25: The Chat was posted when the user was at the zone. Instead of "At Site", the "Here" and "Away" might be better?
- 33) Line 25; Line 58: Attachment (2b a paperclip). This opens a menu/dialogue box for the attachment(s) to be downloaded.
- 34) Line 26: The bold circle indicates that that Chatter-User is one site now. Also, all Fig 2 sub-Chatters are Round.
- 35) Line 26: This chat is attached to the Chat above, it is a thread. The user long pressed on the above Chat to open Fig 4.
- 36) Line 28, Box 2: This is an example (for later) if the user's LinkedIn profile can be seen here by long press on the image.
- 37) Line 29, 35: There are two inserted objects. <<MC: Not sure if to limit to one or how many?>>
- 38) Line 48: Any Chat Thread (group) can be saved. <<MC: Necessary for beta? Or not?>>
- 39) Line 49, 60: These are first new non-threaded response-chats.
- 40) Also a great feature is that we want users to exchange files via our app.

Fig 3:



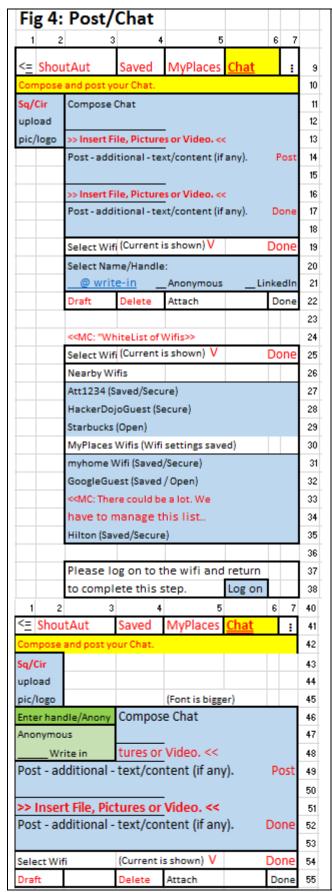
These are places where the user had logged on to the wifi. <<MC: A presumption is that if it was important enough to have logged on to wifi, he spends time there... and may be interested in connecting...>> It maybe blank – but line 14 gives indication of any activity there. He can post chat to anyone of the Chat-Boards in MyPlaces - even if away, i.e. not at the zone.

(It's kind of useful to have "history" of places I been to --"Help, I left my credit card there...can anyone find it please?"...
Also, later: We can add keyword and tagging – so that: We can filter such chats, from all the Places the user goes and display here.)

- 41) Tapping the Board summary will open that Board up in Fig 2 view.
- 42) Line 12, 16, and 20: Not sure if we can get good enough data to populate this this. It would be GREAT if we can.

  Especially, since at Fig 1, it would be nice to something name or address of the place/location, instead of just the SSID. However, we can add this feature after the beta...but, is a <u>must have</u> over the long run.
- 43) Line 13: The Secure or Open is from the wifi settings in the device. These two words are what my devices show. We are giving feedback to the user about the wifi.
- 44) Line 14: Visited = His last visit. Num of Chats = number of Chats on that Board; Number of People is how many are logged on now with that Board open.

Fig 4:



This is where the Chats get composed.

- 45) Line 11, Box 1: The system must decide if to do a Square or Round border.
- 46) Line 11, Box 1: User can upload an image object. Long press opens the image admin menu: Delete, Upload, Take a picture (and load).
- 47) Round: if from Fig 2. Actually, only the ones coming from Fig 2 are Round.
- 48) Square: if pressed Chats at any other screens other than in fig 2. Because, these will be posted at their respective Fig 1 screens.
- 49) Line 11: Where the cursor is when opened. User can enter text.
- 50) Line 13: User can long press on this line and insert an object. Then the cursor moves to following open line and the user can enter more text.
- 51) Line 16: User can insert another object here. How many to allow? I think maybe max two.
- 52) Or, if the above is too crude. Then: the user can long press on any spot on the Chat compose screen to insert image there. And that image will be like in Fig 2.
- 53) Line 15, 17, and 19: Done or Post and final positions to be decided.
- **54)** Line 19: User to select the wifi he wants to post the Chat to. Or, confirm it. But, he could be at home or at anywhere. He could be at home and it wifi; or he is at coffee shop (away from his work wifi) and he could be on the coffee shop wifi, etc. No matter.
- **55)** <<MC: I think it is best to show his current wifi that he is on, alternative is the last one logged on.>>
- **56)** Line 20/21: I think we are not having LinkedIn for beta. Thus, user can pick anonymous or write in a handle.
- **57)** Line 22: Draft means to save to MyChats section. Delete is to go to trash. Attach to attach files or objects.
- **58)** Line 22: If the user had used a handle previously, it is shown here and is selected as default.
- 59) Line 22: The reason to give option for anonymous is that at some places, he may not want to use his handle. Then, if anonymous we don't show his picture?!
- **60)** Line 22: Done to Post.
- 61) L19: Touching is opens the Wifi Select/Status menu L 25 to 35.
- **62)** Line 27 to 29: The wifi SSIDs that he is within range of.
- **63)** Line 31 to 35: The SSIDs of the MyPLaces where he logged on to the wifi. Even though he is not in range, we have his profile; and thus give him full access.
- **64)** However, if he posts from "away" we indicate as such on the Chat (e.g. L 22, 27 in F1). If he is on site, then his image is bolded.
- **65)** Line 37: if not logged on to a wifi selected (and his credentials were not given previously). We try to make his going to the wifi to log on a getting back to this screen smooth by automating as much as possible.
- **66)** Line 43 to 54 is an enlarged version of the Chat. We can make the font little larger for people to see better.
- **67)** Line 46: I move the handle select to here. This is an option.
- **68)** The Post, Done, Done need to be cleaned up and decided.

Fig 5:

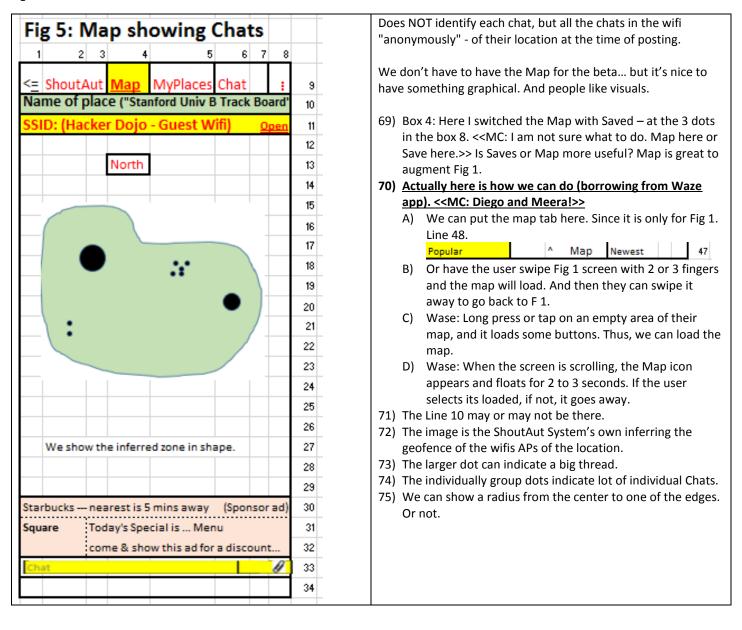
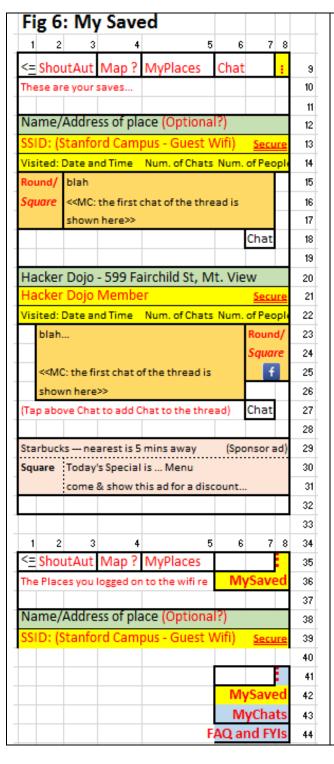


Fig 6:



Bit redundant to MyPlaces? But, it has user saves. This shows the chats that the user had saved, along with basic information.

Also, since we are allowing a chat thread to be save (as opposed to the entire Chat Board, I think it is useful.

- 76) Line 12 and 20 maybe not done by us.
- 77) Line 15 is the First chat of the thread that the user had saved.
- 78) Line 18: We can have this Chat button here or not. The user can tap a Saved chat and that will load in Fig 2. Now: Ideally we take him to the first of the exact chat thread he had saved.
- 79) Line 39 and 40: Shows that the user had selected MySaved in the 3 dots. We can keep showing the Line 40 as long as he in on that screen.
- 80) Line 48 This has things to explain how to use and what to do in the app.
- 81) Swipe left to delete to trash.
- 82) Swipe right to do what?

Fig 7:

