GUM

Grand Unified Messenger
with integrated Mesh Network

BrianErvin
BE UI DESIGN

GUM Proposal

Contents

Project Description

Develop a cross platform mobile messaging app that brings chats from all messenger apps into one convenient interface with convenience features. This messenger app will have an integrated mesh-networking messenger built in for when networks are down.

Competitive features include: group chats, video chats, voice chats, merged chats across platforms, location, and integrated Google translate button.

Convenience features include: banking, payment systems, Bluetooth device operation, automated lists and alerts, and fitness data.

Mesh network specific features include: public chat, private group chats, broadcast to followers (twitter facsimile), images and voice chats.

Competitive Analysis

Grand Unified Messenger (GUM) is a unified messaging app that enables peer-to-peer (mesh network) communication. This way two people can communicate by relaying their message through other mobile phones instead of using a Wi-Fi network or cellular service. The stand-alone mesh network personal messaging applications are rarely successful. The problem is that not enough people have the program to enable it to work properly. It's simply too convenient to use any other messaging service to communicate than to convince everyone else to download it for your own benefit. Other problems in the past have been that the mesh app hasn't been available across all platforms and also lacked security.

The objective here is to get the mesh messaging system on as many phones as possible. The idea is to entice users to use a convenient centralized messaging system they can customize.

There will be two versions of the app offered. The first will be a Lite version that has full functionality but no real security. The second version will require payment and feature various forms of security. The interface for both versions will be flexible for user preferences. There can be messaging categories for work, family and friends etc., themes showing or emulating which service is being used in the app, a unified interface that brings everything together seamlessly. User names can be superseded using the contact list so there doesn't have to be guessing about who is who should one friend use an alias.

Other features will include video chats though FaceTime, Skype, Viber or similar integration. Other integrations include images through Snapchat, Pinterest, Instagram or similar platforms. Google Translate will be integrated to speed up international conversations.

There will be two primary ways to monetize the product.

A free version will use a centralized server to access peoples' Facebook, yahoo, text messages, Skype, VK, or any other messaging application to enable GUM to consolidate personal message traffic. Along with visible advertising, the personal data can be collected and discretely sold according to the user agreement.

The upgraded version will use the app to access Facebook, yahoo, text messages, Skype, VK, etc instead of a centralized server. Different security SSLs can be purchased that are similar to bank security protocols, and an open source security protocol will be an option as well. All P2P messages will be encrypted.

Competitive Analysis Chart

Factors	Competion A: Firechat	Competition B: Disa	Competition C: Jott	Competition D: WeChat
Description	Mesh messaging system	Unified Messaging system	Mesh messaging system	Unified messaging system
Platform	Android & Mac iOS	Android. Mac iOS coming soon	Mac iOS	China
Security	aug 2015, end to end encryption	secure FB login	none	it's china
messaging systems	Mesh messaging system	SMS, MMS, FB, Telegram, WhatsApp	Mesh messaging system	combines everything. The model for unification.
Popularity	civil protests around the world	developers and beta testers	Among teens in the classroom	immensely popular in China
additonal features	bluetooth and wifi, groupchats	uses contacts, merge conversations, call user, sends images	bluetooth and wifi, groupchats	communicates with home devices, banks, credit card,
navigation	bluetooth and wifi, groupchats	uses contacts, merge conversations, call user, sends images	bluetooth and wifi, groupchats	communicates with home devices, banks, credit card,
look and feel	clean and simple. Red white and grey.	pretty simple and straight forward. Nice, bright and friendly color scheme	clean simple with blue white and grey. More soothing than firechat.	green dark and light grey, white, looks simple, but know it isn't. textured surfaces.
multimedia	text and images, group chat	text and images, regular and group chats	text and images, group chat	text, images, videos, group chat, video call, photo libraries, voice chat, web chat, search locations, banking, operate devices, get a taxi, pay utilities, airline tickets, lottery, languages,
impression	The technology is well developed, especially with the encryption. But it's not much different than Jott in usage.	It's under-developed but shows promise. I still don't know if American users are ready for it.	It's like a simple beta program. Not that different from Bleam, an earlier program that does the same thing.	Fully thought out and well implemented.

Analysis of Competition

The technology and popularity of mesh networks has advanced significantly since my initial investigation in 2012. The interest in the US for mesh networks has largely been in recreational arenas such as classroom conversation and concert goers. Outside the US, mesh networks are powerful tools in large protests. While there was little interest in mesh network among US protestors in 2012 due to various factors, this user groups' interest may have changed with their personal experiences using it at Burning Man and concerts.

While protestors are a large user group, a mesh network is still limited by device range and number of users that can bounce information. The burgeoning popularity of unified messaging (already proven in to be successful in China) could be an opening to spread a mesh network over a wider range.

Unified messengers in the US are underdeveloped when compared to the goals of GUM and the utility of WeChat. But the technology is present and mature enough right now, unlike 4 years ago. New technology doesn't need to be developed if it can be purchased or licensed from FireChat or Jott. The goal would be to keep the unification easier to use and more powerful than other unification software like Disa to maximize the appeal. This combined with a powerful and beautiful user interface should entice all kinds of users.

Strategy Brief

Situation

Since the financial collapse of 2008 that was a result of increasing demand of oil and a limited supply that brought the price up high enough to break vulnerable financial bubbles, countries, economies, and people have been struggling. In economically vulnerable places like Greece, various services get shut down because of a contraction of money or energy. Out of necessity people improvise. One of these needed improvisations was a decentralized local mesh network used for communication. Since then, mobile mesh networks have been used by protestors and eventgoers to communicate with one another.

Without the problem of systems shutting down, mesh networking isn't a solution. Due to cognitive dissonance people don't want to face a problem until it bites them in the rear. This means the mesh networks that have been built were built ad-hoc with limited functionality. And are abandoned once centralized systems come back online. Another problem with mesh networks is that computers must be in communicating proximity. If the signals cannot bounce from machine to machine the messages are lost.

The problem is that there isn't a practical way to make an appeal to people to get on a mesh network. And it can't be a small demographic; it must be large.

So the strategy is to create a way to make communication more convenient and attach mesh messaging into the program as an added feature that may not have much immediate appeal. That is until the power goes out.

The Situation of the Appeal

As of 2015, in Pew Research survey (Mobile Messaging and Social Media), 36% of smart phone users have messaging apps on their phones. That's 36% of 76% of the US that uses smart phones. That works out to be about 90 million Americans. According to Vertoanalytics' charts, 70% of those are between 18-50 yrs old (A Day in the Life). Popular messaging apps are FaceBook Messenger, WhatsApp, Skype, Google Hangout, Twitter, Instagram, Android Messages, iOS Messages, and Yahoo Messenger. Around the world, other messenger apps include Line: Japan, Nimbizz: India, Kik: Canada, Viber: Cyprus/Belarus, VK: Russia, and WeChat: China. The appeal would be to make all of this convenient. If all the conversations were in the same app, or on the same menu in simple attractive interface that had added functionality and convenience features it would solve a practical problem for people right now.

Objective

By May 6, 2016, launch the Grand Unified Messenger app on Android and iOS with 30,000 users through the beta testing program within a budget of $50,000.

Target Market

The target audience of the beta program will be smart phone users of all major platforms between the ages of 18-29 interested in new internet-technology that uses messenger apps daily.

The primary target audience is smart phone users between the ages of 18-50 that use messenger apps. Approximately 63 million Americans and 1 billion people worldwide.

Market Needs

There is a growing interest in unified messenger apps like WhatsApp and WeChat in the US and around the world. WhatsApp is underdeveloped when compared to the scope of GUM. A unified messenger would be a faster and more convenient way to send messages.

The interest in the US for mesh networks has largely been in recreational arenas such as classroom conversation and concert-goers. Outside the US, mesh networks are powerful tools in large protests. While there was little interest in mesh network among US protestors in 2012 due to various factors, this user groups' interest have changed with their personal experiences using it at Burning Man and concerts.

Beta Group

• The beta group target will be smart phone users between 18-29.
• Interested in new technology and the internet.
• Frequent daily use of communication software on mobile devices.
• Who want to be on the leading edge of what's new.

Strategy

• Design a unified messenger App.
• Add extra convenience features to attract as many users as possible between the ages of 18-50.
• Fundamental features are messaging through other popular messaging apps with text and images.
• Group chats, video chats, voice chats, merged chats across platforms, location and integrated Google translate button and connecting to contact lists.
• Other future convenience features may include banking or payment systems, device operation, to-do/grocery list automation and alerts, and fitness data.
• Design two versions: a free low/moderate security version and a paid for high security option version.
• Integrate mesh-messaging network into the app.
• Recognize people on contact lists in the mesh and enable encrypted conversation.
• Other mesh features will include public chat, private group chats, a facsimile of Twitter and Followers, images, and voice chats.
• Get a capital investment of $50,000 for one year's development.
• Hire on a talented programmer, UX designer, and marketing agent to get a beta version in the hands of 30,000 users.
• Focus on tailoring the convenience features and messaging integration to the users' preferences and keep the mesh program functional but minimalist.
• Begin rolling out the free version on major mobile devices before the end of the year along with some form of advertising to get people interested.
• Then we will have a product and customer base to get a larger investment for another year of development with more talent.

Tactics

• Raise $50,000 on kickstarter or similar.
• Find the right talent. Find a hosting service to fit the budget.
• Setup a website that describes the project and the goals. Shows sneak peaks, news, a forum, and eventually distribute the beta version.
• Grow user base to 30,000 users.
• Use feedback to plan out how to overtake other competing messaging apps.
• Introduce version 1.0 with an online advertising campaign.
• Aim for 1-2 million users with a goal of 63 million in the US, 1 billion worldwide.
• Get more capital via VC, Kickstarter, or lending institution and hire more talent.
• Begin with more advanced convenience features and mesh technology.

Risk Matrix

#1 Lawsuits
#2 Competition
#3 Hacks
#4 Lose Talent
#5 Lose Capital
#6 Poor Planning
#7 Don't keep up with software and hardware changes
#8 Budget Constraints
#9 Server failure
#10 Poor reach or appeal.

GUM probability/impact matrix		
High Probability		**Risk #2 Competition** **Risk #4 Lose Talent**	**Risk #1 Lawsuits**
Medium Probability		**Risk #3 hacks** **Risk #8 Budget constraints**	**Risk #5 Lose capital**
Low Probability		**Risk #6 poor planning** **Risk #9 server failure**	**Risk #7 Don't keep up with software/hardware changes** **Risk #10 Poor reach or appeal**
	Low impact	**Medium Impact**	**High Impact**

SWOT Analysis

SWOT Analysis & Counter Measure Strategies	Strengths	Weaknesses
	• Well dessigned convenient messaging app • Customer-centric • Intuitive interface • Adaptable to various platforms • Patent(s) (will get one or more) • Creative, semi-experienced startup team	• Doesn't know how to raise capital • Not experienced in process planning and execution • Product won't be high quality at first • No strong monetization plan yet • New brand name • Poor Planning
Opportunities • No real unified messenger for US or world (exceptin china) • Proven succes for unified messenger found in china • Mesh networks are growing in popularity in high schools, concerts, and protests • A news story about the functionality of a mesh network messenger app during a power outage or network outage would be free advertising • Mobile devices are increasingly preferred over desktops for internet use.	**SO Strategies** • Create convenient unified messenger • Migrate users; focus on US first • Make migration super easy on all platforms from all major messenging apps. • Advertise through beta user group	**WO Strategies** • Read books on raising captial and project planning • Advertise product/brand name to high schoolers, concert goers, and protesters. (grungy/underground) • Use events in press to gain reputation with these groups. • User user feedback to increase product quality
Threats • Lawsuits • Competitor like FaceBook or Google making a competing app without the budget restraints. • Hacks • Keeping up with software and hardware changes • Lose talent • Assassinatin attempts by governments over crowd control	**ST Strategies** • Leave budget for lawsuits. Is there insurance for this? • Continuous innovation • More patents • Maintain strong defenses with security. Use outside expertise getting started. • Pay employees well. Offer counseling as a benefit. • Prepared. Prepare more.	**WT Strategies** • Get good at raising capital. Hire people that are good at this. • Build a good monetization plan. Find some consultant to help with this. Research how competitors do it. • make security a priority from the ground up

How to deal with these risks based on impact matrix

#1 Lawsuits (1st risk factor)
It's form of economic warfare and forceful coercion.

#2 Competition (2nd level risk factor)
The defense is continuous innovation and expansion. It's a race without a finish line. The defense: innovation and patents; and the ability to defend the patents. Use user feedback to improve the product.

#3 Hacks (3rd level risk factor)
It's a subversive attack. The goals: defamation, monetary loss, and halt of services. The defenses are proactive security measures with the latest and the best. Don't repeat Target's mistake. Make security a priority from Day 1.

#4 Lose Talent (2nd level risk factor)
People are funny unpredictable animals. Maintaining a sense of security and a growing system will give smart diligent people enough motivation to stay. But smart and lazy creatives will need more interesting reasons to stay. Maybe a bonus structure based on performance and a looser time schedule.

#5 Lose Capital (2nd level risk factor)
Because I have no idea what I'm doing. So I must read. Hire people to help raise capital. Build a solid diversified monetization plan. Find out how competitors make money with these products.

#6 Poor Planning (4th level risk factor)
Because I have no idea what I'm doing. I just need to study relevant materials.

#7 Don't keep up with software and hardware changes (3rd level risk factor)
If, for example, we don't keep up with some changes made in FB messenger, the messaging login will be broken for millions of users and they won't be able to message through our app and will need to return to the FB app. Or perhaps a new device comes out and we neglected to have the software ready for that operating system, it would mean those users would migrate away from the app.

#8 Budget constraints (3rd level risk factor)
Not having enough money would mean a lack of innovation or keeping up with technology and security changes.

#9 Server failure (4th level risk factor)
The system would be down. This would shake peoples' faith in our system. Loss of credibility.

#10 Poor reach or Appeal (3rd level risk factor)
Without this we can never get off the ground. All the compliments in the world won't make a success. People need to be using it.

In Order of Impact

#1 Lawsuits (1st risk factor)
#2 Competition (2nd level risk factor)
#4 Lose Talent (2nd level risk factor)
#5 Lose Capital (2nd level risk factor)
#3 Hacks (3rd level risk factor)
#8 Budget constraints (3rd level risk factor)
#7 Don't keep up with software and hardware changes (3rd level risk factor)
#10 Poor reach or Appeal (3rd level risk factor)
#9 Server failure (4th level risk factor)
#6 Poor Planning (4th level risk factor)

Work Breakdown Structure

task	Start	Given Work
• Kick-off		
• Evaluation phase		
• Competitive Analysis		
• Discover competitive advantage	Jan 13, 2016, 1:00 PM	2 days
• Strategy Brief	Jan 12, 2016, 5:00 PM	
• outline market penetration strategy	Jan 14, 2016, 8:00 AM	2 days
• Risk Matrix		
• Identify Risks		2 days
• Work Breakdown structure		
• Divide work to team memebrs		2.5 days
• Gantt and Task Allocation		
• task allocation		2 days
• Budget	Jan 28, 2016, 12:00 PM	
• Budget		1 day
• Cretive Brief/ tech rqmts	Jan 31, 2016, 5:00 PM	2 days
• Management Proposal	Feb 4, 2016, 8:00 AM	2 days
• Project mockup	Feb 8, 2016, 8:00 AM	2.5 days
• Test Plan	Feb 10, 2016, 5:00 PM	2 days
• Final plan	Feb 15, 2016, 8:00 AM	3 days
• Decision to enter next phase		
• Conception phase		
• Assemble Team for 1st time		
• introduction activities		1 day
• Wireframe		
• UX Designer Wireframes app		2 days
• Wireframes reviewed with programmers	Feb 22, 2016, 8:00 AM	1 day
• Decision to define specifications		
• Specification phase		
• Define processes		
• specify UX Designer tasks		1 day
• Define back end		
• Specify front end developer tasks		1 day

task	**Start**	**Given Work**
• Define features		
• Specify back end developer tasks		1 day
• Define layout		
• Complete layout of app from screen to server functions		1 day
• Specification phase complete		
• Development phase		
• Back end		
• Database creation		
• Server program protype		2 weeks
• Establish connections to front end		
• Front end connectivity		2 weeks
• Back end protoype completed		
• Front end		
• Interface development		
• UX Design prototypes		1 week
• Tests can start		
• Documentation		
• Guide		
• online instructions and help		1 day
• Technical specifications		
• Typical limitations of devices with the network software		1 day
• Test phase		
• Internal testing		
• QA testing		5 days
• External testing		
• Beta Testers		3.4 weeks
• End of development phase		
• Delivery		
• Deployment to Clouds		
• Deployment specialist		4 days
• Prepare servers		
• Activate Servers		1 day
• Market roll-out phase complete		0 days
• Party to celebrate market launch		
• celebration activities		1 day

Team Description

Team members:
Product manager
UX/UI Designer
Front end interface coders for iOS
Front end interface coders for Android
Back end server coders x2
Quality Assurance and Testing specialist
Deployment and Cloud specialist

Product manager
Roger Buck
Seeking managerial position for mobile IT system and applications of organization
by utilizing technical knowledge and management skills

Qualifications
8+ years total experience in information technology
2+ years of experience in enterprise application management
A creative mind with expertise in project management and resource planning
Hands on knowledge of IT systems and architecture in enterprise
Languages: English, some German

Experience:
2013- present
SofTech Ltd., VA
Position: Enterprise Application Manager

2010-2013
Innotech Corp. TX
Position: EAI project manager

2005-2008
MDF GmbH. Germany
Position: Technical engineer for 3D measurement software development

UX/UI Designer
Dean James
Seeking Designer position in mobile device interface development.

Qualifications
2+ years experience in web and mobile app design

6+ years experience in freelance graphic design
Creative formal designs and expertise is ease-of –use interfaces
ACE certifications in Adobe CS6 Photoshop and Illustrator
Assoc. in Web Design from Ai. BA Fine Arts Southwestern University

Experience:
2015
CurrencyTracker Ltd
Position: UX/UI Designer

MobileRadar
Position: UX/UI Designer

2014
FindIt Ltd.
Position: UX/UI Designer

2008-2013
Self-employed
Freelance Graphic Art

Back end programmer #1
Thomas Anderson
Seeking a challenging position as software engineer and possibly career growth

Qualifications:
UNIX, C, C++, Visual Basic, M68000 Development, ClearCase, VAX, System Servers,
SGI, Intel 8086 Assembler, VMS, Pascal, LISP, Basic, Macro-II. MS, MS/DOS, Solaris,
SCCS.
6+ years industry experience
BA Computer Science 2007, Berkley

2014-Present
Aztek Industries, TX
Setup LAN and firewall with Linux and Windows servers. Setup Linux web hosting
servers and wrote Perl code for the system

2010-2014
Java Integrated, CA
Created web sites and documentation, using HTML and Java on various projects.
Wrote user documentation. Enhanced HP-UX C libraries, worked in UNIX and C
using CLearCase.

Back end programmer #2
Anthony Williams (Smoothie)

Seeking full time or contract Software Engineer position

Qualifications:
UNIX, C++, Visual Basic, M68000 Development, DEC, System Servers, SGI, Intel 8086
Assembler, VMS, Pascal, Macro-II. MS, MS/DOS, Solaris, SCCS, LabView
4+ years industry experience
BA Computer Science, Pittsburg

2012-present
Freelance and part time projects in central Texas

Front end programmer #1 iOS
Alexander Slavschik (Sasha)

Seeking full time work in mobile app development for iOS.

Qualifications:
Objective-C, SDK, Lib, CoreDate, PHP, HTML, CSS, Javascript, jQuery, AJAX, SQL,
MySQL
4+ years industry experience
Computer Science, Belarusian State University
Speaks Russian, Belarusian, English

2014-present
iOS Developer for Intens D.O.O.

2012-2014
Freelance iOS Developer for Nafta Foods, rkjugovic.org.rs, LoftyGames,
NashaNiva.by

Front end programmer #2 Android
Sean O'Cleary

Seeking full time or part time work in mobile app development for Android

Qualifications:
Objective-C, SDK, Lib, PHP, HTML5, CSS3, Javascript, jQuery, AJAX, SQL, MySQL
3+ years industry experience
Computer Science, University of Texas Arlington

2012-2016
Bilet Ticketing Services
Android developer for online ticket sales on Android mobile platform

Quality Assurance
Polina Borel

Seeking full time work on Quality Assurance of mobile apps or web copyright
content

Qualifications
2 years industry experience
HTML, CSS, some Javascript
Language arts and web design at Belarusian State University
Speaks, Russian, Belarusian, German, English, Italian, Ukrainian
2014 to present
Noon Industries copywriter and web Quality Assurance testing.

Cloud and Deployment Specialist
Malgorzhota Krumin

Seeking part time or freelance Cloud Deployment work

Qualifications
2+ years experience deploying apps for small companies in Poland, Czech Republic,
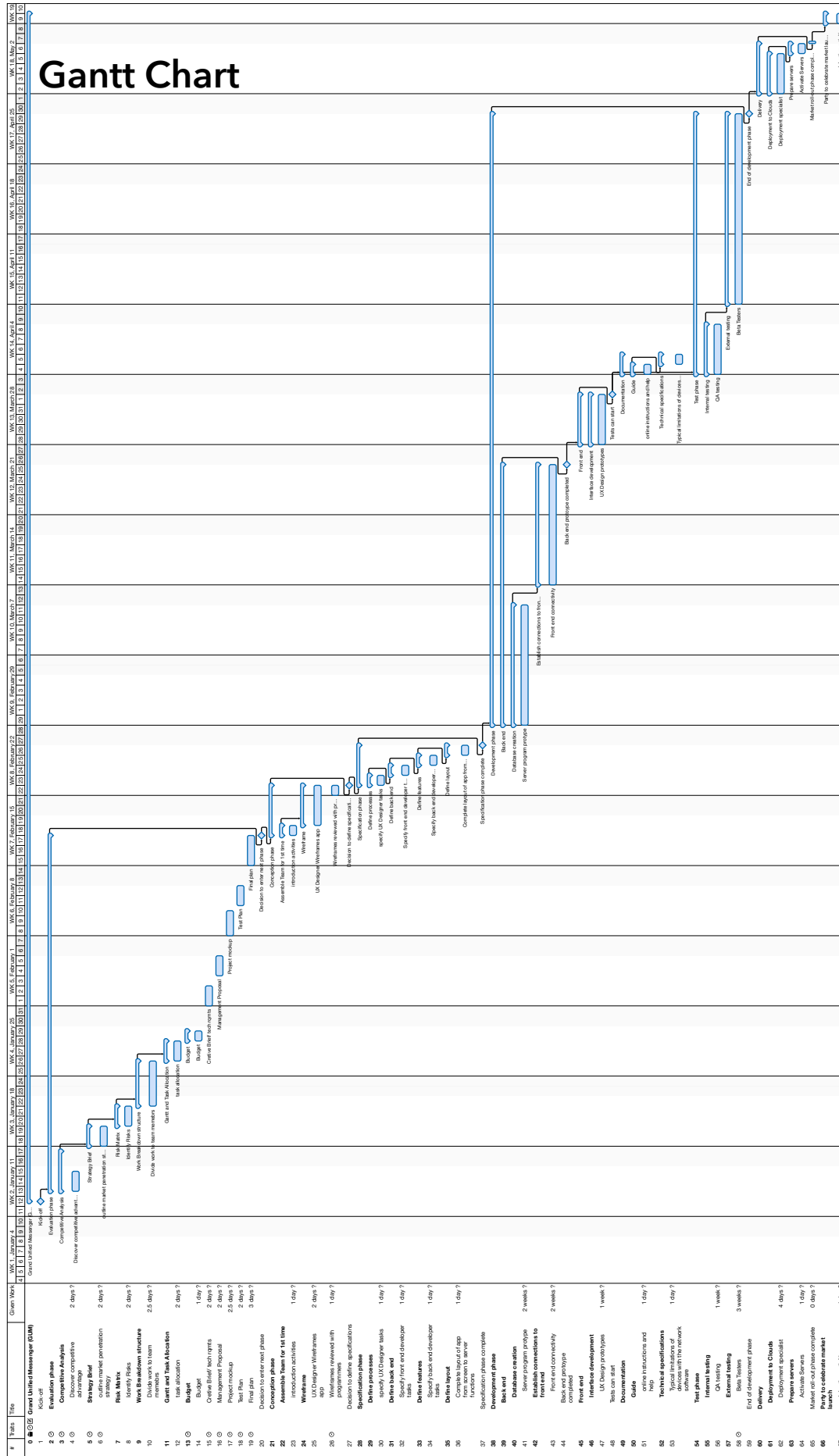and Germany
Language Arts and Computer Science, Jagiellonian University, Poland
Languages: Polish, Russian, English, German, Czech, some Serbian and Belarusian

2013 to present
Freelance Cloud Deployment Specialist

Gantt Chart

#	Title	Given Work
0	Grand Unified Messenger (GUM)	
1	Kick-off	
2	Evaluation phase	
3	Competitive Analysis	
4	Discover competitive advantage	2 days ?
5	Strategy Brief	
6	outline market penetration strategy	2 days ?
7	Risk Matrix	
8	Identify Risks	2 days ?
9	Work Breakdown structure	
10	Divide work to team members	2.5 days ?
11	Gantt and Task Allocation	
12	task allocation	2 days ?
13	Budget	
14	Budget	1 day ?
15	Cretive Brief tech nqrms	2 days ?
16	Management Proposal	2 days ?
17	Project mockup	2.5 days ?
18	Test Plan	2 days ?
19	Final plan	3 days ?
20	Decision to enter next phase	
21	Conception phase	
22	Assemble Team for 1st time	
23	introduction activities	1 day ?
24	Wireframe	
25	UX Designer Wireframes app	2 days ?
26	Wireframes reviewed with programmers	1 day ?
27	Decision to define specifications	
28	Specification phase	
29	Define processes	
30	specify UX Designer tasks	1 day ?
31	Define back end	
32	Specify front end developer tasks	1 day ?
33	Define features	
34	Specify back end developer tasks	1 day ?
35	Define layout	
36	Compile layout of app from screen to server functions	1 day ?
37	Specification phase complete	
38	Development phase	
39	Back end	
40	Database creation	
41	Server program protype	2 weeks ?
42	Establish connections to front end	2 weeks ?
43	Front end connectivity	
44	Back end prototype completed	
45	Front end	
46	Interface development	
47	UX Design prototypes	1 week ?
48	Tests can start	
49	Documentation	
50	Guide	
51	online instructions and help	1 day ?
52	Technical specifications	
53	Typical limitations of devices with the network software	1 day ?
54	Test phase	
55	Internal testing	
56	QA testing	1 week ?
57	External testing	
58	Beta Testers	3 weeks ?
59	End of development phase	
60	Delivery	
61	Deployment to Clouds	
62	Deployment specialist	4 days ?
63	Prepare servers	
64	Activate Servers	1 day ?
65	Market roll-out phase complete	0 days ?
66	Party to celebrate market launch	
67	celebration activities	1 day ?

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Task Allocation

Task allocation	Grand Unified App	Brian Ervin			
date	task	people	rate	hours	cost
1/15/16	Discover competitive advantage	manager	45	4	$180.00
1/18/16	Outline market penetration strategy	manager	45	4	$180.00
1/20/16	Identify Risks (SWOT)	manager	45	4	$180.00
1/26/16	Divide work to Team Members	manager	45	4	$180.00
1/27/16	Gantt and task allocation	manager	45	4	$180.00
1/29/16	Budget	manager	45	4	$180.00
2/2/16	Creative Brief	manager	45	4	$180.00
2/8/16	Project mockup	manager	45	4	$180.00
2/17/16	Test plan	manager	45	4	$180.00
2/18/16	introducitons, present plans	manager	45	8	$360.00
		UX Designer	35	8	$280.00
		IOS coder	30	8	$240.00
		Android Coder	30	8	$240.00
		Back end 1	30	8	$240.00
		back end 2	30	8	$240.00
2/22/16	Wireframes for app	UX designer	35	16	$560.00
		iOS coder	30	8	$240.00
		Android Coder	30	8	$240.00
		Back end 1	30	8	$240.00
		back end 2	30	8	$240.00
2/23/16	specify tasks	manager	45	8	$360.00
		UX designer	35	8	$280.00
		IOS Coder	30	8	$240.00
		Android Coder	30	8	$240.00
		back end 1	30	8	$240.00
		back end 2	30	8	$240.00
2/29/16	server program	back end 1	30	80	$2,400.00
		back end 2	30	80	$2,400.00
3/14/16	front end connectivity	iOS coder	30	80	$2,400.00
		Android Coder	30	80	$2,400.00
3/28/16	UX prototypes	UX designer	35	40	$1,400.00
4/4/16	QA testing	QA specialist	25	24	$600.00
4/7-29/2016	beta testing		0		$0.00
5/2/16	Deployment	Deployment specialist	25	32	$800.00
5/6/16	Activate servers	Back end 1	30	8	$240.00
		back end 2	30	8	$240.00
			Labor total		$19,220.00

Budget

	Grand Unified App	Brian Ervin		Jan 30 2016		
	Overhead					
2/1/2016-7/1/2016	Office space 111 W Anderson	$20 sq ft/yr		1000 sq ft	6 months	$10,000.00
	Infinite Energy 6 mo	~ $120/mo			6 months	$720.00
	TimeWarner Internet	$60 /mo			6 months	$360.00
	Water/utilities	$15 /mo			6 months	$90.00
	Macbook Pro		$2,000	x2		$4,000.00
	Adobe Creative Cloud		$50		6 months	$300.00
	1 yr server space eHost		$100		1 year	$100.00
	Domain name		$10		1 year	$10.00
	Small Business liability insurance				1 year	$1,500.00
					pre-total	$17,080.00
					10% contingency	$18,788.00
	Licensing					
	FireChat IP License				1 year	$10,000
	Labor Total					$19,220.00
					Total	$48,008.00

Creative Brief

Project Overview

Create Grand Unified Messenger, a messenger app for smart phones that imports all messenger chats into one convenient interface with convenience features. This messenger app will have an integrated mesh-networking messenger built in for when networks are down.

Objective

By May 6, 2016, launch the Grand Unified Messenger app with 30,000 users through the beta testing program within a budget of $55,000.

Target Audience

The target audience of the beta program will be smart phone users between the ages of 18-29 interested in new internet-technology that uses messenger apps daily.

The primary target audience is smart phone users between the ages of 18-50 that use messenger apps. Approximately 63 million Americans and 1 billion people worldwide.

Project Tone

The GUM Messenger app will be designed around a universal appeal of friendly convenience for everyone. It will require a friendly color scheme, a combination of fresh and nostalgic associations in styling, and absolute simplicity.

User Experience: The user will log into their other messenger systems through the GUM messenger app. All chats will be listed by title on the home screen permitting one to two screen taps to get between chats. Each chat will show which service is in use by an icon beside the conversation title. Features include: combining chats, integrating images, videos, voice, and google translate.

Style

A hybrid combination of simple 1960's pop and currently trending flat Surface. Different panels will slide over each other and show translucency and shadow to give a perception of depth, reference and organization.

Colors: Blue/White, with traces of red for a cool, airy, formal feeling.
Fonts: Ariel, Ariel Black, Trebuchet.

Logo

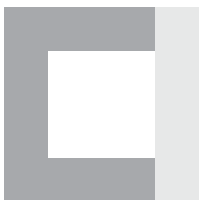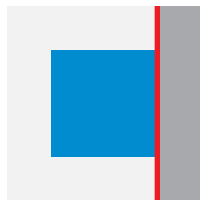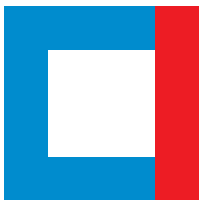**Color Palette:** Restful
Left: logo variation colors
Right: hierarchy of app theme colors
Blue: 008bcd
Light grey: f1f1f2
Dark grey: a7a9ab
Red: ed1c24

Technical Requirements

Computers needed for UX and coding: Intel i5 or i7 Quadcore laptops or desktops 2.2Ghz or faster with 8-32GB RAM and SSD. Dedicated graphics cards preferred but optional. These can be company or personal use machines, Mac or PC.

Web hosting: Scalable custom service that can grow with the demand from reputable hosting service like eHost or Rackspace.

Software: Adobe Creative Cloud or CS6, Python, Ruby, or other programming platform, MS Office, Merlin Management Software.

End user: smartphone with wifi made within the past four years. Initial beta group will require Android or iOS.

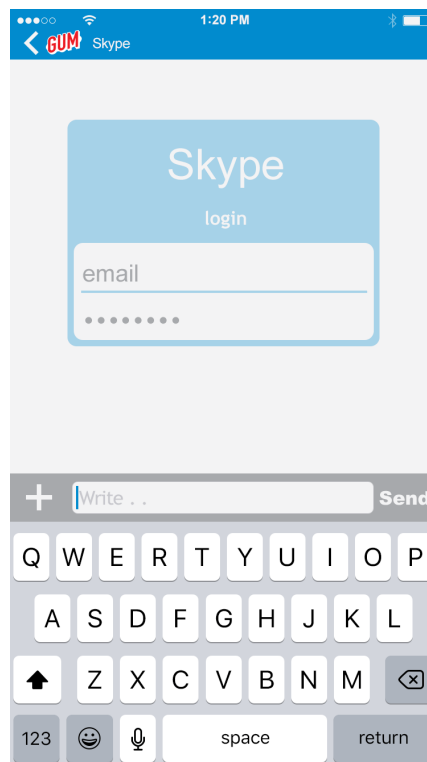# Interface and Architecture

Interface

Messages
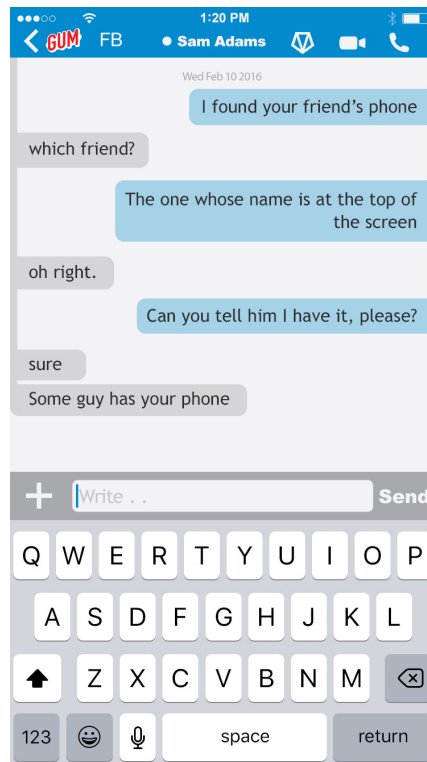

Chat through FB Messenger
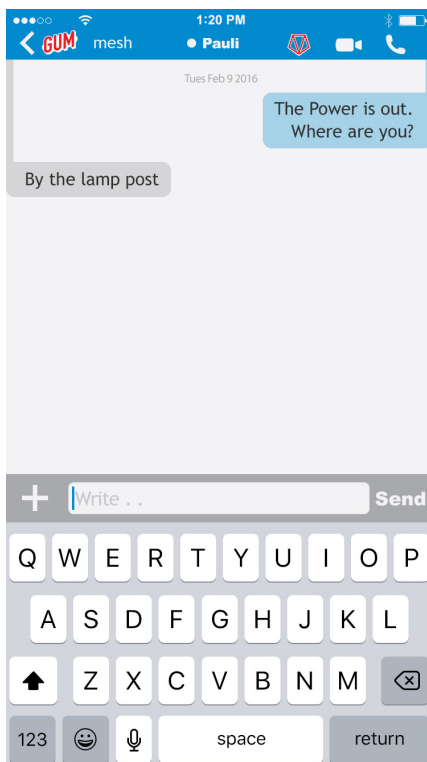
Mesh Chat

Login

Design Choices

The design choices were largely based on keeping the conventions of other major messengers. There is a set of conventions that everyone uses. The conventions could be changed but it would cause confusion for users. Most messengers have a blue and white, and a little red color scheme that always works. The tones change a bit, but they are very similar. GUM uses a 60's pop variation on the color theme. Common icons universally recognized were kept, and the other icons at the bottom that are usually accompanied with text were reduced to text only. This works for the 60's nostalgia part of the design because icons are relatively new as of the past few decades. The only icon that is new is the mesh icon, which is an inverted pentagon with two mesh lines in it. It references V for Vendetta. Pentagons are more anthro-pomorphic and don't have demonic connotations that 6 and 7 sided igures have. It's also more organized than a small drawing of a net. Included at the top is a little reference to show what service is being used. Here, FB and mesh are shown.

I did, however, make some changes to the standard design. The colors are less contrasty to be easier on the eyes. The top panel is much thinner and to the point. The text bubbles were changed to work more like meshing gears. Removing the bubble graphic bits on the sides allows more room for text. The design also allows me to stretch each bubble closer to the opposing side while still being coherently discrete bodies of text. I could take it further than I did. For the home screen of messages, the icons show which service is being used. The grey could easily be replaced with pro ile photos, or the icons could look more like the branding of the service they represent. The bottom menu provided an interesting opportunity to use the whole logo design of a stick of gum. Rather than have the buttons side by side, the text buttons could stack easily leaving room for the logo.

Architecture
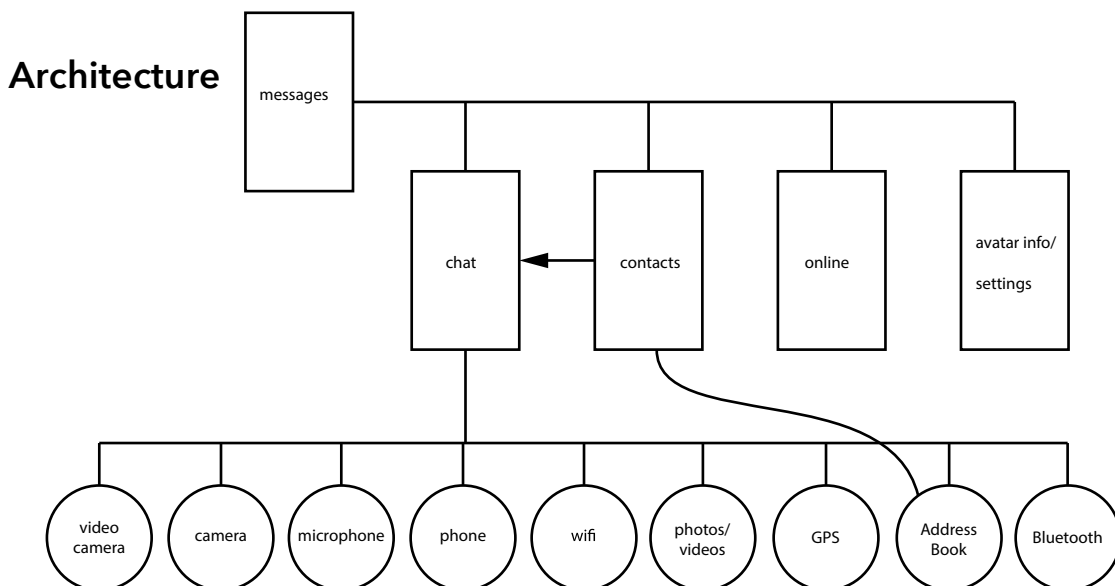
Quality Assurance Testing for Grand Unified Messenger

Quality Assurance is the responsibility of the QA Specialist, Polina Borel.

Scope

The quality of the project begins with strict adherence to the project scope. Any new ideas or variations on the original project scope will be put aside for future planning. This maintains focus on core objectives and meeting project timelines.

White Box testing will proceed during development by the programmers.

Initial Quality Assurance testing is to be done between April 4-8, 2016 before the Beta launch on April 11, 2016. The QA specialist will complete this using SCRUM methodology.

Quality Assurance testing will cover black box tests on these specified features:

Unified Features:
- Test login and messaging through these messenger platforms:
    - Facebook
    - WhatsApp
    - iMessage
    - MessageMe
    - Skype
    - Viber
    - VKontakte
    - SnapChat
    - Instagram
    - GroupMe
    - Kik

- Test Group chats, voice chats, video chats, images testing across messenger platforms and phone platforms (limited to Android and iOS for Beta)
- Test merge chats across platforms
- Security and Compliance testing

Mesh Performance Testing:
- Test mesh network initiation and response.
- Test mesh network message relay and hold times.
- Test battery usage under mesh network
- Test mesh network speed over distance
- Test mesh network distance limitations

Schedule

April 4: Begin Black Box testing on Unified features
April 5: Black Box performance testing on mesh features
April 6: wrap up testing and write documentation
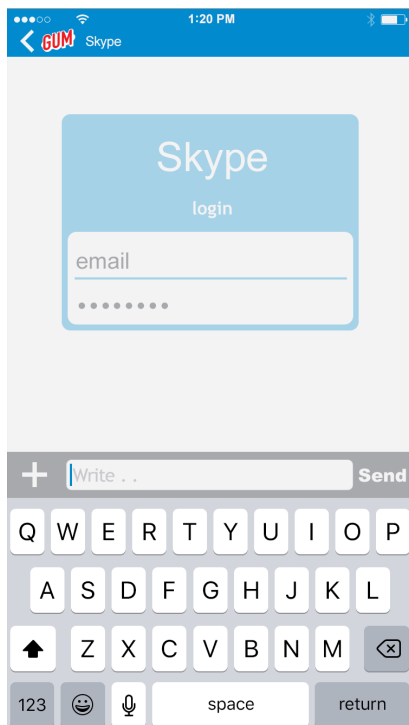April 7: Create resolution strategy and plan Beta launch.

Standards

• Certified Mobile Application Tester (CMAT)
• SCRUM methodology

Test Case #1

User logs into Skype via GUM. Login functions properly.   User can now message other skype users through GUM.
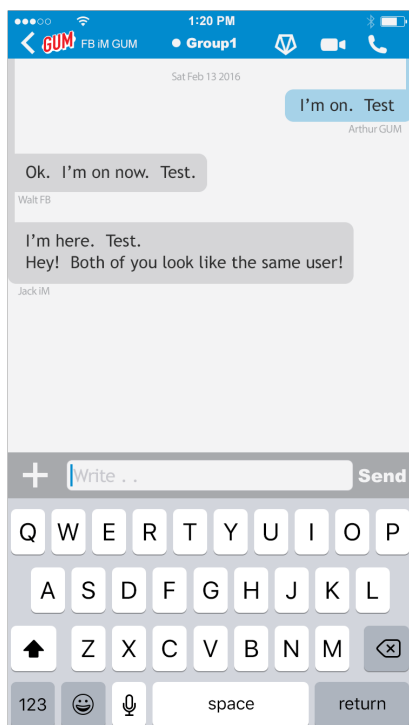
Login Test

Test Case #2

The users from different services (iMessage, FaceBook, GUM) have a group chat with messages being relayed via GUM. iMessages is having difficulty showing two different users. There is no way for the iMessages user to make a distinction between users. The relayed FB user shows up as the GUM user to the iM user.

Merged Test

Proposed Fix

GUM will add user names at the bottom of each iM message so the iM user knows who sent which message in group chats.

Works Cited

Duggan, Maeve. "Mobile Messaging and Social Media." Pew Research. Pew Research, 19 September 2015.

"A Day in the Life of Messaging Apps: Usage Demogrpahics." Verto Analytics. Verto Analytics, n.d. Web. 7 Feb 2016.