Proposal For:

Peer to Peer
Instant Messaging System

Submitted By:

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To whom it may concern,

This proposal is meant to outline a new product for B-Tek Software to sell. The proposed product is an instant messaging system designed primarily to allow coworkers, managers, and other company departments to be able to communicate with each other in real time. Companies can use this system in place of expensive internal phone networks.

This instant messenger has several advantages over an internal phone network. One such advantage is that this messenger is designed to work on a local area network via a desktop or laptop. No expensive or specialized equipment is required for this system to work. Another advantage is that it is simple to set up and use. Instead of having to dial an extension, to contact IT for example, the user would just select the name of another user from a list and send them a message.

This instant messenger could also be sold for private use. As detailed below in the Individual Use Section of Target Markets (p.5) due to the large number of free instant messengers on the market for individual use it may be wiser to just market this product just to companies and organizations. I suggest that we release a lite version of this program for free to try to gain some additional market share and gain a foothold among individual users.

Sincerely,

Joshua O. Lee

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Description of Proposed Product

This product is a lightweight peer to peer instant messaging system. This piece of software is meant to allow two users to communicate with each other on a local network without having to set up a server for it. The proposed instant messenger will use two separate modes to send communications to the other connected instant messengers. The first mode is “private mode”. This mode uses a TCP connection to allow only two users to talk to each other at once. The second mode is “public mode”. This mode uses UDP broadcasting to allow all the users to talk to each other at once. It will also actively broadcast its IP address and the name of the current user to every one on the current sub-net via UDP, to help simplify the process of users connecting to each other.

List of Proposed Features

- Lightweight and Portable
- No Server Required
- Two-Way Peer To Peer Communication via a TCP Connection
- Using UDP Broadcasting to Create Virtual Chat Rooms (VCR) on the current Subnet
- Messengers will Actively Broadcast its IP Address and Current User to Make Connecting Easier for the Users

Target Markets

Sale for Individual Use:

With the large number of free instant messengers available on the market for individual use, trying to market this product for that purpose would likely be a waste of time and resources. Instead of trying to market a sell-able product I suggest that we release a free lite version of this software for individual use. This lite version will give individuals and companies a chance to test out the software, then purchase the full version if desired.

Sale for Commercial Use:

This is where we should focus most of our marketing for this product. We can market this instant messaging system to other companies as a way for employes to communicate with each other via their computers. An example where this messaging system would be useful in a businesses environment is allowing employees to communicate with IT in real time to help resolve problems. This would out compete other instant messengers because it will only allow employees to communication with people on the companies internal network. As seen in **Figure 1** computers 1 and 2 can communicate with each other freely but when computer 3 tries to connect to computer 4 over the internet the networks firewall prevents this connection. Other features that would interest a company is its lightweight, no server is required for the instant messenger to work, and it virtual chat room mode, or “public mode”, which will allow multiple employes to talk to each other at once.

Time and Cost Estimates

The following outlines the estimated cost and the amount of time it will take to complete the project. This estimates is based off four assumptions.

1. Only one engineer will be working on this project
2. The engineer will be paid $13.70 per hour of labor (based off of a $40,000 a year salary)
3. 40 hours long five day work weeks are assumed
4. A 150% overhead will be assumed

Project Time Line				
Task	**Week1**	**Week2**	**Week3**	**Week4**
GUI Design				
Software Design				
Debugging				

Cost Est.

	Hours	**Cost**
GUI Design	24	$328.80
Software Design	60	$822.00
Debugging	40	$548.00
	124	$1,698.80
	Overhead	x150%
	Total Cost:	**$2,548.20**

Deliverables

On completion of the peer to peer instant messenger will provide the following:

- A lightweight instant messaging system that does not need to be installed
- The ability to broadcast its IP address and name of the current user
- Direct communication between two messengers via a TCP connection.
- A public mode where all messages are transmitted to all computers running the messenger on that subnet.
- A lite version with some above features removed

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Education:

Fromberg High school **Fromberg, MT**
Graduated May 2011

Montana State University Billings Collage Of Technology **Billings, MT**
2nd Year, Application and Program Development

Work Experience:

Dave Young
June 2011 – August 2012
Construction and Renovation

Computer Skills:

- Operating Systems
  - Windows
  - Linux
- Programming Experience
  - C/C++
  - BASIC
  - JAVA
  - C#
  - HTML
  - JAVA Script
- Some Electrical Engineering Experience
- Extensive Computer Repair Experience
- Proficient in the 3D Modeling Software Blender
- Proficient in the Graphics Program FireWorks

General Skills:

- Welding
- Small Engine Repair
- Carpentry
- Accounting
- Business Management

Appendix A: Diagrams

Figure 1: Illustration of connections that the instant messenger allows and not allow