Isobel Lennox

CTEC165 Final Exam

Instructor: Chris Martin

11 Nov 2014

I've created an online version of this exam here:

<http://ctec.clark.edu/~i.lennox/BusinessWebPractices/FinalProject/>

1. *What factors should be considered when setting an hourly rate for freelancing? Prior to learning about these factors, how would you have set an hourly rate for freelancing?*

There are plenty of 'hourly-rate' calculators online that will offer a simple one-size-fits most solution to how to determine your hourly rate as a freelancer. Many may argue that those tools may simply be for statistical use rather than literal-- Or simply a tool for clients to assume their developers are ripping them off. The question still poses, how do you set an hourly rate on your own?

Immediately when thinking about this question, the word that comes to mind is, "*relative*."

I know, it's a sophisticated word that really shows how educated and palate-enriched I've become over the past few years. However, each developer and client will have a mix of their own needs that will always be unique. In my opinion, even a developer should never have a fixed hourly rate. It should fluctuate depending on the factors I've become familiar with:

**Overhead charges** such as rent, supplies, software, insurance, taxes, and a base salary expectancy comparative to what someone in your field is expected to make. If you bid too low, you will undercut yourself and the market you serve. If you list your price too high, you'll have problems finding work. Charges will also fluctuate depending on if you pay for extra plugins or software for a single clients needs.

**Experience**: are you charging for senior experience, or do you need their project as a skill-building piece? Sometimes you may have to undercut yourself in order to gain a reputation that may benifit you in the long run, such as being able to show future clients that you built something for so-and-so. How impressive!

**Services**: are you offering maintenance after the site is published? Are you offering technical support or teaching them how to use what you've been leased to create for them?

**Location**: Where are you working? Are you paying for office space, or are you working from home? How much overhead is reasonable to charge based on your work environment?

**How big is the project**? When creating a contract with a client, most clients do not want to see the price go up as more and more time goes by. Plan your project well, and create a fixed rate based on how much time you think you will spend on it, as well as calculating overhead and software charges. That way, the client will be much more understanding when prices go up after something outside of the contract gets added later, due to their request rather than you taking longer than expected.

A really fun cost calculator from thenuschool.com based it's result on the factors:

* What is your hourly rate? (My answer: $20)
* How many hours to you estimate working? (200)
* Is te project interesting? (meh)
* After the project... (will look good on my portfolio)

Based on these answers, I should charge $7,200 with a lowest price ("break-even") price of $4,400.

Can it be that easy? In this case, the factors are a bit unclear and vague, leaving little room to adjust calculating factors bassed on location or otherwise. As of December 2014, this website offers an online class "How To Price Like A Pro", which brings up the idea that it may be useful to invest time into getting to understand your financial needs and how to, indubitably, price like a pro.

It's okay to experiement with your rates. You don't have to come up with the perfect plan in the beginning. Ater playing with your rates and charges for a few projects over the span of a year or two, you will have a better understanding of your needs, as well as what a client will expect and agree to. Then, you may be able to create a template for how you charge clients.

Before I considered some of these factors, I would have most likely created a simple algorithm to determine an hourly rate based on a salary and would have undercut myself. I feel that having a spreadsheet as part of your contract to account for and calculate fees and charges is a fantastic idea, as it is flexible and allows you to draw a very simple map for your client, which makes both parties happy.

2. *Facebook will be updating its terms and policies on January 1, 2015 and introducing Privacy Basics. How will these changes impact your use of Facebook? What surprises you about these changes? Are there any areas that cause you to be skeptical or concerned over privacy? If so, what are they and why?*

As of Fall 2014, Facebook's Terms and Policies page reads the following:

**Updating Our Terms and Policies: Helping You Understand How Facebook Works and How to Control Your Information**

Over the past year, we’ve introduced new features and controls to help you get more out of Facebook, and listened to people who have asked us to better explain how we get and use information. Now, with Privacy Basics, you'll get tips and a how-to guide for taking charge of your experience on Facebook. We're also updating our terms, data policy and cookies policy to reflect new features we've been working on and to make them easy to understand. These updates take effect on January 1, 2015. As always, we welcome your feedback about our policies.

**Privacy Basics**

Privacy Basics offers interactive guides to answer the most commonly asked questions about how you can control your information on Facebook. For example, you can learn about untagging, unfriending, blocking and how to choose an audience for each of your posts. This information is available in 36 languages. Along with our privacy checkup, reminder for people posting publicly and simplified audience selectors, Privacy Basics is the latest step we've taken to help you make sure you're sharing with the people you want.

**Helping you get more out of Facebook**

Every day, people use our apps and services to connect with the people, places and things they care about. The updates to our policies reflect the new products we've been working on to improve your Facebook experience. They also explain how our services work in a way that's easier to understand. Here are some highlights:

Discover what's going on around you: We’re updating our policies to explain how we get location information depending on the features you decide to use. Millions of people check into their favorite places and use optional features like Nearby Friends (currently only available in some regions). We're working on ways to show you the most relevant information based on where you are and what your friends are up to. For example, in the future, if you decide to share where you are, you might see menus from restaurants nearby or updates from friends in the area.

Make purchases more convenient: In some regions, we're testing a Buy button that helps people discover and purchase products without leaving Facebook. We're also working on new ways to make transactions even more convenient.

Find information about privacy on Facebook at the moment you need it: To make them more accessible, we moved tips and suggestions to Privacy Basics. Our data policy is shorter and clearer, making it easier to read.

Understand how we use the information we receive: For example, understanding battery and signal strength helps make sure our apps work well on your device. We ask for permission to use your phone's location when we offer optional features like check-ins or adding your location to posts.

Get to know how the family of Facebook companies and apps work together: Over the past few years, Facebook has grown and we want to make sure you know about our family of companies, apps and services. We use the information we collect to improve your experience. For example, if you're locked out of your Instagram account, you can use your Facebook information to recover your password. Nothing in our updates changes the commitments that Instagram, WhatsApp and other companies have made to protect your information and your privacy.

Your information and advertising: People sometimes ask how their information is shared with advertisers. Nothing is changing with these updates—we help advertisers reach people with relevant ads without telling them who you are. Learn more about ads and how you can control the ads you see.

**Giving you more control over ads**

We've heard from some of you that it can be difficult to control the types of ads you see if you use multiple devices and browsers. In the past, if you opted out of certain kinds of advertising on your laptop, that choice may not have been applied for ads on your phone. We know that many people use more than one phone, tablet or browser to access Facebook, so it should be easy for you to make a single choice that applies across all of your devices.

That's why Facebook respects the choices you make about the ads you see, across every device. You can opt out of seeing ads on Facebook based on the apps and sites you use through the Digital Advertising Alliance. You can also opt out using controls on iOS and Android. When you tell us you don't want to see these types of ads, your decision automatically applies to every device you use to access Facebook. Also, we're now making ad preferences available in additional countries, beginning with Australia, Canada, France, Germany, Ireland and the UK. We hope these updates improve your experience. Protecting people's information and providing meaningful privacy controls are at the core of everything we do, and we believe these announcements are an important step.

*Note: I decide to copy the text in the event that at some point in time, my link provides different information than what I am basing my feedback upon.*

With their newest Terms and Policies update, Facebook has created an easy-to-access document called Privacy Basics which they describe as "tips and a how-to guide" which is written in a short, clear and easy-to-read format for the general user. I appreciate that one can read through updates without being confused by a long and dry document with technical jargon. However there are few aspects that I am finding harder to swallow...

One such aspect is that Facebook is employing a 'Buy' button that helps people discover and purchase products without leaving Facebook. I am interested in what direction this will take. Will facebook try to be the next Amazon? Will it slowly morph into the mess that MySpace became after trying to imitate iTunes? I am skeptical about whether this 'Buy' button will be useful or desirable. Frankly, the concept creeps me out -- especially with the use of the string "without leaving Facebook" when explaining that this button will help people discover and purchase products. It makes me feel like they are trying to become the only website poeple ever need to use.

Facebook's statements about privacy and use of information appeared to be helpful at first glance, but when trying to find specific examples, you are only greeted with vague explanations such as "we give you the option" and "we ask your permission". However, I feel that in many cases access to features will be denied to users unless these "options" are accepted.

For example, if you wish to an app connected to Facebook, but do not want Facebook to use your information to give that data to third-party services, there is no non-data collecting alternative. This forces you to accept the terms if you wish to use that feature at all.

Their description of how they do use this data is also vague, implying only that they will "improve your experience". An example of data usage Facebook provides is, "...if you're locked out of your Instagram account, you can use your Facebook information to recover your password".

Another section states that you can control the types of ads you see using Facebook's new 'ad preferences' feature, which will "help advertisers reach people with relevant ads without telling them who you are". So what do they do with it? The only answer they provide is that, "We use the information we collect to improve your experience".

So, how will things change about how I use facebook?

I am interested in furthering my research in the development of the "buy" button, and what the actual implementation will look like as well as who the products will be coming from. I will also change my ad preferences to see the changes that apply to me. Finally, I plan on being more careful with which third party apps I agree to connect to facebook for the sake of an easer login. Thanks, Facebook for the eye opener!

3. *Read an End User License Agreement for an operating system (Mac OSX; Windows 8; Linux), iTunes, Adobe Photoshop, or a software program of choice and:*

* *List and discuss five areas of the EULA that stood out to you while reading.*
* *Did the EULA create any conflicts with how you currently use the software? If so, in what ways? How would you propose to resolve the conflict?*
* *Most users click the “I Agree” button without reading the EULA, why is this not a best practice?*
* *How could EULA's be redesigned in order to better inform users of the software?*

I chose to read the End User License Agreement for WinSCP, an open source free SFTP client, FTP client, WebDAV client and SCP client for Windows. I chose this software specifically because it is the one I abuse the most, yet know nothing about its terms. Many of the tools I could have written about are evolving, competing softwares that I may jump between so often that I would create an obsolscent case study out of in this particular case. WinSCP is one of the few tools that I have stuck with and prefer to stay loyal to.

When installing software, such as WinSCP, you are greeted by the EULA that's we've all grown to ignore. I think most of us know that there are things in there that we would rather be blissful and ignorant to rather than take responsibility for handling software like literate adults, and understanding the full intentions and restrictions that apply.

The license actualy is a bit humorous, stating, "The licenses for most software and other practical works are designed to take away your freedom to share and change the works. By contrast, the GNU General Public License is intended to guarantee your freedom to share and change all versions of a program.."

I like that they point out that the term "free" as in "free software", as the case is here, means freedom-- not price. The freedom provided is the given right to distribute copies of the software, even if you charge. This freedom also permits that you have access to the source sode and can change the program or use it to create distributive works. However, you cannot change the license itself. The "catch" is, by accepting the terms and distributing copies of the software you accept the responsibility to respect the freedom of others.

This means, if you distribute the software, whether for free or for a charge, this unchanged license remains the same, and they can then do what they wish to the software just as you were given the right to. You must make sure they have access to the source code and this license, so they know their rights.

Luckily, this EULA did not give me any conflicts with how I use this software. However, I did learn what is covered, and expected to be covered (read clause 11: Patents) in a license. By reading this EULA, I understand more risks and vulnerabilities that could apply to me in the furutre. I will most likely refer to this nd other EULA's in the future when authoring my own.

Most users click the “I Agree” button without reading the EULA. However, is this not the best practice. The EULA clearly stated, in this case, that by accepting the terms there are responsibilities ad liabilities being placed onto the aceptee. There are also terms that are delightful to learn such as the allowances and rights you are given when accepting terms. In both cases, it is important to know exactly what the software you are using expects of you. Clearly, if you intend on making profit or not from any software or product, there is possibility to run into unexpected issues which could later turn into your resposibility, just as you had accepted.

EULA's in general could benefit from a redesign in order to better inform users of the software, especially by containing less jargon and conveluted definitions. In the Open Source License Agreement I chose to define, the authorship was very unclear, and it took me multiple times to re-read the same pagges and cross examining definitions to understand what was being said.

This particular EULA was very clear, well-worded, and even humorous. The voice of the EULA was friendly and far from condescending. There was no jargon; each word was fully digested and appreciated by this individual.

4. *Choose an open source license from* [*http://opensource.org/licenses/*](http://opensource.org/licenses/) *and give a human definition of what the license permits and restricts.*

I chose to translate the open source license for Apache 2.0.:

**Grant of copyright License:**

This License is an outline of the terms and conditions for use, reproduction and distribution of Apache 2.0.

Subject to the terms and conditions to this License, each Contributor hereby grants You (being an individual or Legal Entity using this license as permitted) a copyright license which is perpetual, worldwide, non-exclusive, no-charge, royalty-free, and irrevocable.

This copyright license allows you to:

* reproduce the Work or Derivative Works
* prepare Derivative Works of the original Work,
* publicly display or perform the Work or Derivative Works
* sublicense and distribute the Work or Derivative Works

Any of these actions can be done in Source or Object form.

"**Source**" form means the preferred form for making modifications, including software source code, documentation source, and configuration files.

"**Object**" form means any form resulting from mechanical transformation or translation of a Source form, including compiled object code, generated documentation, and conversions to other media types.

A *Contributor* is defined as:

the licensor

any individual

and any Legal Entity who is recieving contribution by respective individual

who is incorporated within the work of authorship made available under the License, as indecated by a copyright notice that is included in or attached to the work.

**Grant of Patent License:**

Subject to the terms and conditions of this License, each Contributor hereby grants to You a perpetual, worldwide, non-exclusive, no-charge, royalty-free, irrevocable (except as stated in this section) patent license to make, have made, use, offer to sell, sell, import, and otherwise transfer the Work.

Any patent licenses granted to You under this License will be revoked only if You institute patent litigation against the Contributors with the Work of said Contributors.

If you allege that the Work or a Contribution incorporated within the Work constitutes any patent infringement, then any patent licenses granted to You under this License for that Work shall terminate as of the date such litigation is filed.

**Redistribution.**

You may reproduce and distribute copies of the Work or Derivative Works in any way you please as long as you meet the following conditions:

You must give any other recipients of the Work or Derivative Works a copy of this License;

You must cause any modified files to carry prominent notices stating that You changed the files;

In any Derivative Works that You distribute, You must keep all copyright, patent, trademark, and attribution notices of the Work in the Source form;

If the Work includes a "NOTICE" text file as part of its distribution, You must include a readable copy of the attribution notices contained within any "NOTICE" text file in at least one of the following places:

* within a NOTICE text file distributed as part of the Derivative Works;
* within the Source form or documentation, if provided along with the Derivative Works; or,
* within a display generated by the Derivative Works, if and wherever such third-party notices normally appear.

The contents of the NOTICE file are for informational purposes only and do not modify the License. You may add Your own attribution notices as long as they cannot be construed as modifying the License.

You may add Your own copyright statement to Your modifications, as well as provide additional or different license terms and conditions for use, reproduction, or distribution of Your modifications, or for any such Derivative Works as a whole; provided Your use, reproduction, and distribution of the Work otherwise complies with the conditions stated in this License.

**Submission of Contributions.**

If you wish to submit a Contribution to the Licensor to be included in the Work, You shall be under the terms and conditions of this License, without any additional terms or conditions.

If you executed any seperate license agreements with the Licensor regarding any Contributions, said agreements cannot be superseded or modified.

**Trademarks.**

This License does not grant permission to use:

trade names

trademarks

service marks

product names

of the Licensor, except as required for reasonable and customary use in describing the origin of the Work and reproducing the content of the NOTICE file.

**Disclaimer of Warranty.**

This work is provded "AS IS" without any warranties or conditions of any kind, unless required by applicable law or agreed to in writing.

You are solely responsible for determining the appropriateness of using or redistributing the Work and assume any risks associated with Your exercise of permissions under this License.

**Limitation of Liability.**

Any Contributor will not,in any event, be liable to You for damages.

This includes any direct, indirect, special, incidental, or consequential damages of any character arising as a result of this License or out of the use or inability to use the Work,

This includes, but is not limited to, damages for loss of goodwill, work stoppage, computer failure or malfunction, or any and all other commercial damages or losses; even if such Contributor has been advised of the possibility of such damages.

**Accepting Warranty or Additional Liability.**

While redistributing the Work or Derivative Works, You may choose to give or sell acceptance of support, warranty, indemnity, or other liability obligations and/or rights consistent with this License.

However, in accepting such obligations, You may act only on Your own behalf and on Your sole responsibility, not on behalf of any other Contributor.

You agree to indemnify, defend, and hold each Contributor harmless for any liability incurred by, or claims asserted against, such Contributor by reason of your accepting any such warranty or additional liability.

**How to apply the Apache License to your work**

To apply the Apache License to your work, attach the following boilerplate notice.

For fields enclosed by brackets "[]" replaced with your own identifying information. (Don't include the brackets!)

The text should be enclosed in the appropriate comment syntax for the file format.

We also recommend that a file or class name and description of purpose be included on the same "printed page" as the copyright notice for easier identification within third-party archives.

Copyright [yyyy] [name of copyright owner]

Licensed under the Apache License, Version 2.0 (the "License"); you may not use this file except in compliance with the License. You may obtain a copy of the License at

<http://www.apache.org/licenses/LICENSE-2.0>

Unless required by applicable law or agreed to in writing, software distributed under the License is distributed on an "AS IS" BASIS, WITHOUT WARRANTIES OR CONDITIONS OF ANY KIND, either express or implied. See the License for the specific language governing permissions and limitations under the License.

5. *In what ways is a developer liable for unknown security issues?*

Liability laws and costs provide a way to avoid clients being delivered badly designed, poorly implemented features, inadequate testing and security vulnerabilities from software bugs by raising the risk of raising the developers' costs rather than the clients. This creates a gap between con artists-- creating bad software with intention of the customer coming back to fix it-- and developers who work hard to create a standard of best interest from the beginning, regardless if it is in their financial best interests.

Liability forces software companies to think twice before changing something, and to protect the data they're entrusted with. Though it may be easier (and more desirable) to blame a malicious attacker, Liability means that those in the best position to fix the problem are actually responsible for the problem.

This is good news until a developer is faced with an issue that was not expected or designed to avoid. How do you test against security threats you don’t know exist in your mobile app? Security attacks can be caused by a third-party component, as well as in your own software. The difference bewteen Known vulnerabilities, and Unknown is simply that Known vulnerabilities have already been found and reported, while Unknown vulnerabilities are vulnerabilities that have not yet been found.

It is in a developers best interest to keep looking for security vulnerabilitiyes by getting familiar with all used third-party software packages and libraries as well as their licenses. Licenses can bind the developer to additional liabilities. Open source and third party components are constantly evolving, so it is a good idea to do routine follow ups on updates to stay up to date with this information. Think about it, if you have software that becomes out of date or the security gets breached often-- no one blames the attacker, they blame you for having poor software. The users perception is what counts, and it's up to you as the developer to ensure that as vulnerabilities evolve, so does your software.

*Sources:*

Terrence August and Tunay I. Tunca "Who Should be Responsible for Software Security? A Comparative Analysis of Liability Policies in Network Environments" Graduate School of Business Stanford University/ Rady School of Management University of California, San Diego.March 2011. PDF. 11 Nov 214.

Schneier, Bruce. "Computer Security and Liability" Scheiner on Security, N.p., 3 November 2004. Web. 11 Nov 2014 : <https://www.schneier.com/blog/archives/2004/11/computer_securi.html>

Helppi, Ville-Veikko. "Best Practice #8: Test Security of Your App to Mitigate the Liability and Threats" TestDroid. 04 Dec 2013. Web. 11 Nov 2014: <http://testdroid.com/testdroid/6250/test-security-of-your-app-to-mitigate-the-liability-and-threats>