

Personal Important Frameworks

	Popularity	Future	Community	Expertise
Arduino	Largely Popular	Growing with Robotics and IoT applications	Open Source and a main stay on almost all electronic forums and hobbyist sites	Beginner Level with little barrier to entry
Raspberry Pi	Largely Popular	Small but growing with Robotics and rapidly growing with IoT applications	Open Source Linux Operating System and is a large component of electronic forums and hobbyist sites	Medium Level with little barrier to entry (basic understanding of Linux is needed)
Android	Very Highly Popular	Future growth looks strong with an estimated 84% market share	Slightly Open Source where developers can use the Android Development Kit to write applications largely based on Java	Medium to Moderately High level with low barrier to entries (ADK and IDE are free to download)

Social Networking Application Tools

- IDE – Geany
- Version Control – Github
- Programming Language – HTML, CSS, Javascript, PHP
- Code Libraries – Bootstrap, Apache, PHP
- Design Tools – Giffly, Inkscape
- Hosting – SMTP, HTTP, MySQL
- Testing Framework – Apache-Test, Unit.js

*This project is largely out of my scope of expertise. I'm really reaching hard to understand any of the tools needed for this kind of application. I did my best interpretation of what would be needed for this kind of application with what I could find.

Cost of Learning

Tool	Estimated Prior Exposure (Hours)	Experience Deficit Cost	Net Cost*
Geany	100+	--	20
Github	25	16	36
HTML	50	16	36
CSS	50	16	36
Javascript	0	16	36
PHP	5	16	36
Bootstrap	0	16	36
Apache	5	16	36
Giffly	0	16	36
Inkscape	100+	--	20
SMTP	0	16	36
HTTP	0	16	36
MySQL	0	16	36
Apache-Test	0	16	36
Unit.js	0	16	36
		Total Cost:	508

*Net Cost = Sum(Tool #n*20)+(Deficit Cost [16] if applicable)

I have completed this assignment to the best of my ability. I know so little about tools needed for this kind of application development that I wouldn't have bid to contract it in the first place. This is a small disclaimer if I'm completely wrong about the functions of a few tools. I researched as well as I could and derived my applications of each tool as best as I could.