

Work Packet 2

TO: Professor Maddox
FROM: Sean Bayley
DATE: Sept 30, 2014
SUBJECT: Analyzing your audience

In the last sequence, I touched on the importance of being able to recognize someone's specialty / department and using that information to help guide your communication with that person. We will pursue the topic in more detail below.

VARIOUS AUDIENCES AND CHARACTERISTICS

As a software developer, one's primary audience are fellow team members: engineers with various specialties tasked with completing different components of a large project. Apart from immediate team members, software developers must also communicate with project managers and, in some cases, with either sales / marketing teams or even directly with the client.

Most engineers will have *at least* a Bachelor's degree, many with a Master's or higher. Some will be "veterans" to the field, with invaluable experience as to how the industry actually operates and various "tricks of the trade" picked up during the course of their career. Others will be fresh college graduates who, in some cases, may have a better grasp on some of the more highly theoretical aspects of computer science, as well as their application. The most important component of the audience is the fact that they are working collectively towards the same goal: completing their own individual / group project as best as possible so that the larger, collective project can be completed as well. As such, communication should be centered around aspects of the project which pertain to the current audience; it would not be beneficial to concern an aerospace engineer with the process required to reduce GPS memory usage.

APPLICATION OF COMMUNICATION

Fellow team members will hope to gain some beneficial information that assists them in some way *with their own work*. That is the whole point of dividing the project into tasks for separate teams: each team has a specialty that is capable of providing something useful for the collective project.

Additionally, as a developer, there is a high chance that I'll be working directly with the client to ensure that their end goal is actually being met, as well as our own internal management and sales / marketing teams to keep them up to date on the status of all ongoing projects. Each community will have their own interests and priorities. Management will be most concerned with the workflow of the project and ensuring that the timeline is being met. The Marketing team will be most interested in exciting components of the work that we are developing. And the client will be invested in producing a product which meets or exceeds their expectations while also aligning with their philosophy and core values.

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SUBJECT: Crafting an Argument

Communication as a software developer should primarily be centered around the project. As such, much of the communication will invariably involve discussion, or debate, about the best way to perform a certain task or accomplish a certain objective. Providing meaningful contribution to these arguments is a key component of being a member of the Discourse community. We will take a closer look below.

TYPES OF ARGUMENTS

Within the Software industry, most “arguments” will likely be centered around the most efficient way to implement some functionality of the software we are aiming to develop. For example, there might be some aspect of our code that is eating memory and/or unnecessarily taking too much time to process. As there will likely be many team members involved in the process, being concise and constructive will be essential. That is, providing an *actual* solution in as few words as possible (both in the code and in the communication) is critical.

Additionally, there will likely be arguments centered around the overall design of the software. Specifically, matching that design to the client’s desire. This argument will require more than simply demonstrating the efficiency of new and improved code; it will be necessary to first demonstrate that the direction we are headed does not meet the client’s specs, and second, provide an alternate direction that does. This argument will likely be much less frequent for myself than the first, as typically project managers will be concerned with this sort of aspect of the project.

PROVIDING AN EFFECTIVE ARGUMENT

As mentioned above, being concise is always a positive. This specific audience will have a lot on their plate, and the last thing that is needed is to read a one page memo that could be condensed to three sentences. In terms of specific appeals, engineers will almost certainly be more persuaded by appeals to logic and credibility than they would to emotion. The audience wants to see *proof* that what you are arguing is true, practical, *and* able to be implemented. Otherwise, there is no point in pursuing the argument further.

NEXTEK - Software Developer

NexTek software developers are tasked with designing software that play an integral role in national security. Our teams are developing cutting edge software in a variety of fields, including: satellite imaging, security, data mining, artificial intelligence, and advanced weapons systems. Software developers at NexTek have the ability to work in any type of project that most interests them — that includes the option to switch teams at the end of each project cycle.

Location: Santa Barbara, CA
Role: Software Developer
Job Type: Full time
Salary: \$75,000/yr

QUALIFIED APPLICANTS

As one of the leading firms in our field, our software developers are held to the highest standard. Applicants must *at least* meet the following:

- Bachelor's in computer science or related field
- 6 months experience minimum in software related field
- Implement proficiently in C++, Java, Python, Ruby
- Thorough understanding of Windows, OSX, and Linux operating systems

PREFERRED APPLICANTS

- Master's or PhD (or actively pursuing)
- 2+ years in software related field.
- Internship at NexTek or other defense firm
- Prior military experience
- Specialized skills in AI or Network security

RESPONSIBILITIES

Specific responsibilities will vary depending on project assignment. All team members will be expected to:

- Collaborate with team members to develop solutions that meet project specs and deadline
- Provide clear and detailed progress reports to project managers bi-monthly, including successful aspects of the team and potential problems
- Work overtime if necessary
- Able to travel within the U.S.

All applications should be sent to jobs@nextek.com and should include a cover letter as well as an updated resume. Thank you.