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P R O P O S A L

Champaign Community Unit School District #4

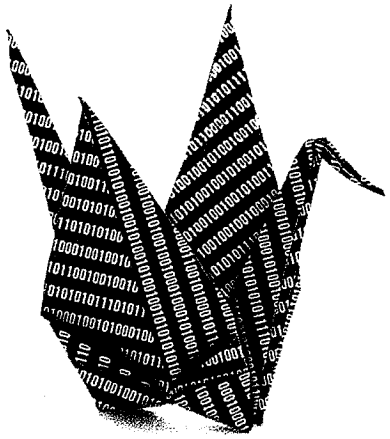
Controlled Choice Student Assignment Plan

Modified November 6, 2013
Version 1.0

ABSTRACT

This proposal is in response to the RFP dated October 23, 2013 for a software application to support the School District's Controlled Choice Student Assignment Plan. The Choice Plan policy has many proven benefits, but can be complex and costly to administer. This proposal covers the development of a software application that can manage that process in an automated, unbiased and auditable manner all while reducing recurring ongoing management costs.

Any questions regarding this proposal can be directed to Jeffrey Young, jeff@codagami.com.



To move an organization forward, you need more than software. You need an artful solution. One that balances the needs of the now with your vision for the future, whether that means developing proprietary software, making the leap to the cloud or creating the secure, client-side systems that streamline your operations here and around the globe. At Codagami, we handcraft those solutions, turnings ones and zeroes into the tools you need to move quicker. Think smarter. And respond faster. So that you're not just planning for the future. You're moving forward to meet it on your terms.

SECTION A - EXPERIENCE AND QUALIFICATIONS

Why Codagami?

Established in 1999, Codagami has a deep history of experience in the enterprise and Fortune 500 market and have found a recent niche in bringing those learnings to government and SMB organizations. We are not a bunch of marketing experts mascarading as web developers - we are engineers through and through. All developers hold top degrees from some of the nation's best Universities. We don't sit behind a wall of corporate politics with our hands tied by red tape, and our motivation isn't bound to a stock ticker. We've groomed ourselves to be a strong, yet lean team of technologists that pride ourselves on delivering great solutions to some very difficult problems.

Where better ideas come from.

Bold solutions require a team of committed problem solvers who understand the project — and obsess over each detail until they find the shortest path to your goal. In 1999, we set about creating a company that would attract that kind of talent. And over the years, we've found them, assembling a team with the diverse skills and technical expertise required to help deploy business-savvy solutions across a broad range of needs, helping regional leaders and global brands do what they do best.

Less theory. More results.

At Codagami, we fully subscribe to the agile software development methodology for two simple reasons — it moves fast and it delivers results. With agile, software is developed in an iterative and incremental process, rather than striving for one comprehensive release somewhere at the end of the road. Using this method, working software is developed much earlier in the process and becomes the standard by which progress is measured. Individuals and interactions become more important than processes and tools, and problems are solved as they are encountered, in close collaboration that ensures better results in a shorter time frame.

Project Management Philosophy

User Stories w/ Key Stakeholders

At Codagami, we firmly believe that the first step in creating amazing applications is fully understanding the problem we are trying to solve. It is only after we have a thorough understanding of the process as it exists today, that we can begin to improve upon that and deliver a superior solution that makes our client's lives easier. The first step in understanding the problem we are trying to solve is creating a collection of user stories. You can think of a user story as a one or two sentence note that explains what things a user does each day or what things a user would like to be able to do to make their job easier.

We like to sit down with the "key stakeholders"; the people in the know that use the system every day and know what its strengths and weaknesses are. We meet with them one on one and watch them perform their job, asking questions all along the way. It is during these meetings where we begin to create our list of user stories. This collection of user stories is very important to the development process since it outlines an actual list of current and requested functionality for the new application.

Mockup Review

With a collection of user stories gathered, we then begin the process of creating a unique look and feel for the application we are creating – we call this the mockup phase. We use a suite of tooling that allows us to create an initial version of the application's look and feel and deliver that to you for approval. It's important to understand that the mockup process is iterative: we deliver a fresh set of mockups for you, we sit down with you and walk through the design and how the end users will use the application, we use the feedback gathered during that session to create an improved set of mockups. We continue to operate in this fashion until the user stories we gathered are one-hundred percent represented in the mockups and that you're happy with what you see. With the design and user experience locked into place, we begin the actual development process.

Development

At this stage in the process, we have two vital pieces of information: user stories and mockups. Using these two key pieces of data, we can begin building your new application. We like to work on a feature-by-feature basis during development. This lets us turn all our attention to a single feature and make sure it is rock-solid before moving to the next feature. This also helps us segment a project up into smaller, more manageable timeframes. Rather than simply saying in X number of months we need to be done, we say in 1 week we need to have this feature finished. Working in shorter timeframes with faster turnaround keeps us moving and prevents your project from stagnating during the process.

We will continue to iterate in this fashion, quickly moving from feature to feature until we've covered all the user stories we've gathered. During the development stage, our team is busy working to fulfill all the requirements we've found, so communication may slow. But rest assured, the lull in correspondence is being created by large amount of productivity occurring behind the scenes. By the time we have a system in place that satisfies all those user requirements, we are able to create a "beta" version of the application. This is an exciting time in the project lifecycle, as it's your first chance to get your hands on the application and start providing more feedback.

Acceptance Testing

From your perspective, the development process may seem a bit like a black box. All of the input you provided us with over the course of past several weeks goes in, and a new application that fits all your needs comes out. While some consultants may consider the project completed at this point, in our minds we are only half way there. Once we have an application that encompasses all the user stories and functionality that we've discussed, it's time for a round of acceptance testing with the same "key stakeholders" from the initial phases using the "beta" application we created.

We again like to sit down with those people and show them around the new application; let them click around and explore. This time, however, the users are the ones asking us questions. How do I do this? Shouldn't I be able to do this? Can we add that? This type of feedback is extremely important in our development process as it lets us know how we're doing. Is the application meeting all your expectations? If so, fantastic! If not, where do we need improvements? The feedback loop at this point in the process is critical to the final application's success. The more time users test the new application, and the more thoughtful the feedback we receive, the better we can deliver the truly ultimate solution.

Incorporating Changes

Once we've gone through a round of acceptance testing, we take all of the feedback we receive and turn that into actionable items for our team to work on. Our development team then picks up right where they left off in the development process and begin further refining the application using all the feedback as their guide. The benefits of this model are two-fold: you get a tangible, usable application earlier in the process and you get a second opportunity to provide feedback and help shape the final product. After the changes have been incorporated into the application, the fun really begins as we finalize the application and get ready to deploy it to you.

Deployment

Gone are the days of a painful deployment process. In this day and age, deploying a final version of a software application should be as simple as flipping a switch. In sticking to that paradigm, we strive to make deploying the final application into your hands as easy and pain-free as possible. If we are providing hosting for the application, deployment can happen any time you're ready. All you have to do is let us know when you want the new application to be available, and we'll have it ready. If the application we're creating is going to be hosted by you, we work with you to create a deployment strategy that minimizes downtime and complications.

Training and Support

At Codagami, we understand that learning a new piece of software can be a challenge. When a client has a long-standing workflow that they've been using for years, trying to get users to adapt to a new workflow can be a challenge. But it's a challenge we believe in and it's a transition that we strive to make as easy as possible for all users. By the time we've deployed the final version of the application, our aim is to have provided application training to all the users of the new system. We want to make sure that they understand all aspects of the application and how they can best do their job: from simple actions like logging in to more complex actions like creating or running reports. Having a brand-new, shiny application is great, but if your users don't know how to harness its potential – you've just wasted your money.

Our post-deployment support doesn't stop after training though. If the new workflow just isn't clicking for your users or perhaps you just need more clarification on a feature, our team is still available via email, phone, or even in person for additional consulting and training. We fully believe that we build amazing software, but we know none of that matters if your users can't use it. We want to provide every opportunity to ensure that your users are comfortable and productive in the new application.

Conclusion

We think everyone wins with this process. As a client, you're constantly in touch with us providing input and having a finger on the pulse of your project. You get to provide input at nearly every step of the process and you get to see the project take shape in small, quick steps rather than large, time-consuming chunks. As a consulting firm, the continual feedback allows us to design and implement amazing solutions to problems that our clients have. And through building amazing solutions, we can give our clients top-notch tools to do their job better.

SECTION B - SCOPE OF WORK DESCRIPTION

The Software Solution

After considering several architectural options for the Controlled Choice application, we firmly believe that this solution can best be delivered and maintained as a web-based application. One of our primary sets of expertise lies in the area of designing, developing, and deploying web-based solutions for needs similar to what Unit 4 is experiencing. We plan to deliver a software package that can easily be deployed and hosted within Unit 4's own IT infrastructure, or pushed to the "Cloud" if higher levels of reliability and disaster recovery are deemed necessary.

As far as technical specifics around the software frameworks and dependencies that will be a part of our delivered package, our solutions mostly rely upon Microsoft-developed and supported products. We have worked with other product vendors, and found that the products we've used from Microsoft have consistently yielded us the reliability and productivity that we need to meet our clients' demands. We are currently planning to build the Controlled Choice application with the ASP.NET framework coupled with a Microsoft SQL Server database, which from our experience, is often a stack that is easily deployable for any IT team managing Windows-based servers.

One of our key differentiating strategies within our project management process is identifying the Key Stakeholders for an application. While many might believe that these stakeholders are administrators and managers, we tend to look to the individuals who are the actual "end-users" of a piece of software. We want to focus on working with the administrative staff who will be working with families to enter in application information. We want to focus on providing the right buttons and forms for individuals entering information to enhance data integrity and speed along the data entry process. We want to work with managers and administrators to ensure that they have the right dashboards and reports to ensure that all processes are working flawlessly and that each year's registration will be a success.

In order to be considered a success by these stakeholders, we are looking to integrate some of the following features into the application. We hope that these can provide a better and more efficient experience for stakeholders to do their jobs.

Random & Complex Logic around Controlled Choice

It is imperative to provide a software solution that isn't just pretty, but actually accomplishes the desired goal - correctly. We've reviewed the requirements and documented logic for the Controlled Choice program, and we realize that there are a lot of "what-if" scenarios that need to be accounted for to ensure that community trust is not broken and laws are adhered to. The functionality to successfully place all the students during a registration process is complex and we're up to the task. We've planned for time to test, analyze, and re-test the logic within this feature set in order to make sure we get it right.

Managing Student Waitlists

Waitlists for students aren't just simple lists of names. Logic has to be defined to handle updating the waitlists as students get placed, withdraw, and move-in to the district throughout the registration process. We want to provide both automated functionality that can handle these kinds of changes without any manual intervention, while also giving visibility to Key Stakeholders as to how the waitlists change and update over time.

Student Transfers

Almost as critical as the kindergarten placement process is the ability to handle requests for students to transfer schools after kindergarten. We want to provide functionality to help employees be as thorough as possible within this process, and ensure that student families are treated as fairly as possible. We can ensure that waitlists are created and managed for each school and each grade within those schools while also accounting for those grades' openings and capacities.

Managing School Capacities and Services

When it comes down to running the Controlled Choice logic and placing students, we need to ensure that every key attribute of a school is accounted for during that processing. We need to make sure that we manage school capacities correctly, and ensure that students with special needs are not placed at schools that can't deliver those services.

Analytics and Reporting

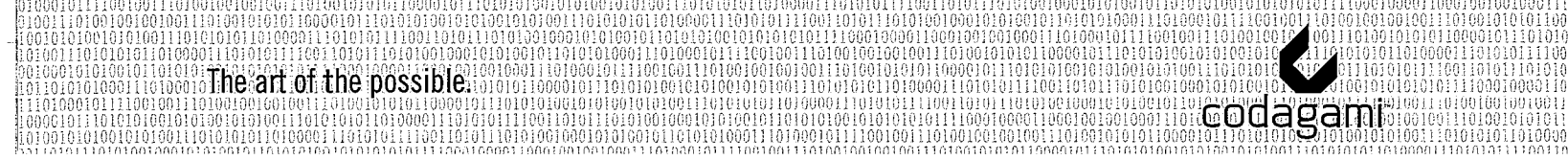
In order to properly manage the Controlled Choice program, administrators need to have the proper vision into how the process is working and where their attention needs to be focused. We can provide key indicators and dashboards to view the health of the program, and provide reports that not only meet the standards required by the program but actually go above and beyond to show how to improve the program if possible.

Auditing

With any program as high-profile as the Controlled Choice program, it is important to provide all the proper hooks and paper trails for auditing the process each year. With our experiences of working for Fortune 500 companies, we fully understand how to build software that adheres to PCI requirements, SEC requirements, and HIPAA requirements. We understand the importance of what is happening and we plan to provide as much transparency into that logic as possible when it is needed.

Support and Maintenance

As with all Codagami projects, we are deeply focused on providing solutions that are of high quality. While we plan for things to be perfect at the time of Go-Live, we realize that some software bugs can still creep up long down the road, and we are glad to offer the promise of addressing any of those issues when found. We also monitor and address security issues immediately when they pertain the frameworks and libraries that we use. If vulnerabilities are identified, we can usually have patches in place within 24 hours.



Proposed Schedule

Date	Milestone
November 20, 2013	Project Kickoff with Unit 4 project leaders.
November 27, 2013	System requirements and user story documentation completed.
December 11, 2013	Mockups finalized and approved by key stakeholders.
January 29, 2014	Development completed.
February 21, 2014	User acceptance testing completed.
February 28, 2014	Training completed and project ready for use.

SECTION C - PROJECT COST

The Unit 4 Controlled Choice Student Assignment Plan represents an amazing opportunity to move the school distrct forward. By injecting technology into the school assignment process, Unit 4 schools will have the necessary flexibility to expand in the future. Unlike any off-the-shelf product that may "fit your need," the solution we are proposing will be specifically tailored to Unit 4's requirements and provide an easy to use, intuitive and cost effective solution to a complex problem.

Cost

We estimate that a project of this scale will require approximately 1200 hours of effort for requirements gathering, development, training and support. Given that level of effort, Codagami is proposing to complete the project on a fixed-bid basis for $98,500.00. The benefits of a fix-bid project are that you know exactly the cost of the project prior to signing any agreements. The price is the price; it will not change even if development takes longer than initially expected.

This estimate includes up to 40 hours of on-site training and support. Any additional training will be billed at our standard hourly rate of $100.00 per hour.

Licensing Agreement

The school district will receive an unrestricted license to use all aspects of the software for perpetuity. There are no annual or recurring costs of any kind.—

Warranty

Codagami warrants that the developed software will be free from defects. Any identified issues with the software will be fixed within seventy-two (72) hours from the time that the defect is brought to our attention.