Organization: Greater Washington County Food Bank

Partner: Jon Schubert

Team Members: Shalini Rao, Blythe Weng, Max Dunaevschi

Project advisor: Professor Barrett

[Project community partner meeting notes](https://docs.google.com/document/d/1GxIlVwTtsn3eNmL2yw0P6RYenS8n_-kTUpjP1brqUG0/edit?usp=sharing)

[URL to the team’s community partner meeting notes (updated on a weekly basis)](https://docs.google.com/document/d/1L0y_U4VanN_kHvdy9zcem9w0Y7dDXBKoxdwOCgGW8sg/edit?usp=sharing)

Major Takeaways:

1. We no longer need to focus on making sure our system links back to Quickbooks. In fact, it would be best if we find a software that would allow Jon to move as much of the inventory tracking out of Quickbooks as possible. The ideal output would be a report generated by Jon who would pick the fields of data he wants to be exported into a Spreadsheet for him to manipulate further.
2. Mobile function for app to scan to deduct from inventory
   1. Then give the option to create invoice from desktop
   2. Want a functional scan, not just informative
   3. Scan into a deduction or receiving queue for jon’s final approval
   4. UPC on each skid (might change, Jon is getting back to us on how he would want the touchpoints of the scanner to work and where the data transfer to Quickbooks would happen in the process)
3. Current time it takes for inventory process just to verify digital vs physical product counts
   1. Any mismatches requires Jon to manually go in and do an inventory adjustment
   2. Takes 2 guys 3-4 hrs each to go count every unit on hand
   3. Done quarterly

[URL to the team’s project plan (updated on a weekly basis)](https://github.com/mdunaevs/GWCFB/projects/1)

Kanban board on GitHub

Here's the repository just in case: <https://github.com/mdunaevs/GWCFB>

[Possible Scanning Solutions Research](https://docs.google.com/document/d/1H1OAf9mxP_z1Dni4iOCLyego0qvRes_54YANmLG3TmE/edit?usp=sharing) (presented to Jon during weekly meeting, still a growing document)

Date: 3/15/21

Sources:

<https://www.gwcfb.org>

<https://www.foodhelpers.org/>

<https://www.pittsburghfoodbank.org/>

**1. Accomplishments Since Last Sprint**

* Scanning Solution Research
  + We conducted research on possible solutions that could be used to help implement the scanning system that our client Jon wants implemented. We looked both into pre-existing solutions (QuickBooks Enterprise, HandiFox) and ways to implement a scanning solution from scratch. This helped us better gauge the scope of this feature and compare various different methods/solutions to see what direction we would like to go when we start our implementation (2 hours, Blythe)
* Research standalone software
  + We conducted research regarding what it would be like to build the software from scratch. This included ideas such as a ruby in rails application as well as a mobile application. For each of the standalone softwares we created a list of potential risks in terms of problems needed to be solved while coding. For example, in the ruby on rails app we would need to implement parallel transactions, API for UPC scanning, transfer data from device to server, and convert information into a customizable report. It was important to look at these solutions to understand how viable it would be to implement them from scratch. After looking into this research we determined that it was out of scope for us to be able to complete this. Furthermore, it was also confirmed by Jon that he would rather have an existing solution that could connect to QuickBooks that wasn’t made from scratch because it would be harder to maintain. (2 hours, Max)
* Background Research
  + We conducted background research on QuickBooks software to see what we can and cannot implement for our scanning solution. For example, we looked into what applications are compatible with Quickbooks and what is not. We also discovered that it would be extremely difficult to connect a custom written software to Quickbooks since it is not open source therefore if we were to implement a custom software, it is likely that it would not be directly connected to Quickbooks. **(**2 hours**,** Blythe, Max, and Shalini**)**
* Presenting possible scanning solutions to client
  + We presented these solutions to our client Jon during our weekly meeting to see what he thought of these possibilities and how we would want us to go about implementing these scanning solutions. He liked the idea of having a pre-existing solution and using a mobile phone scanner (a feature that was available in both QuickBooks Enterprise and HandiFox). As a result, we now know that we should be looking more into pre-existing solutions instead of focusing our research on implementing a system from scratch. (30 min each, Max, Shalini, and Blythe)
* Update Project Plan
  + Since we were able to find out that our client Jon would prefer a pre-existing scanning solution, we updated our project plan accordingly to conduct more research on pre-existing. Furthermore, we were given advice from our TA to attempt to break down the tasks further and list one name per activity. This is important because it will help organize our individual tasks, as well as ensuring we stay focused on what the client actually wants (an existing solution) (Max, Shalini, and Blythe, 30 min)
* Iterate proposal
  + Given the feedback we received from our proposal draft, we edited our proposal accordingly (Max, Shalini, and Blythe 1 hour)
* Create Client Meeting agenda.
  + As part of the PM role, Shalini created a client agenda which was sent to Jon the night before. This was very useful because it led to a more detailed discussion, since Jon was prepared with all the information we needed. The meeting we had lasted longer than usual (50 minutes compared to usual 30 minutes) in which Jon was able to elaborate more on our questions since he had time to look over the questions. (Shalini, 30 min)
* Client Meeting
  + We held our weekly meeting with our Client Jon to present the background research that we conducted as well as gain a better understanding on the exact features that Jon wants implemented in the scanning solution. This information will help us determine what solutions to look for based on the features that our client wants. (Blythe, Shalini, Max, 50 min)

**2. Blocks and Problems**

Client

* Having a lot of trouble with some of Quickbooks accounting features. Quickbooks pulls reports for each donation item and calculates it by “average price per unit” instead of just the current price per unit. This is another example of the Quickbooks software not being suited for a nonprofit organization’s needs, despite being the “nonprofit version.” Jon’s dislike for this specific feature has made him more exasperated with the software and led him to pivot our project direction a bit further away from linking our scanning system to Quickbooks.
  + He would like our system to be as standalone as possible, with an option to output reports into an Excel sheet to be transferred to Quickbooks for final tallies instead of storing all inventory in Quickbooks.
  + We’ve had to amend our project vision a bit to look for a software that its own database system included that give Jon the capability to move as much of the inventory tracking out of Quickbooks as possible.
* Need to think more about the desired task flow of how the new solution would fit into the shipment and distribution process. Jon hadn’t fully thought about where the touchpoints of the scanner would be and what form of data would be transferred to Quickbooks until we asked him more about exactly where barcodes would be placed to most effectively reduce time spent taking physical inventory. There are some decisions to be made by Jon about what exact part of the distribution process will the quantity be deducted from total amount on hand.
  + We sent him a recap email with clarification on what exact details to think about in relation to these decisions with a request that he get us his answers sometime mid-week so we can focus our efforts on a system that would fit those specifications.

Team

* Need to be more detail oriented in our written assignments. We spoke with the TA about our past assignments and the reason we lost points was because of missing details. More specifically we need to explain the “so what”. In our assignments we do a good job listing out the items we need to tackle, problems we have, what we did throughout the week, but we never end up explaining the importance of what we are doing or will do. Adding the so what component to our explanations will provide a richer understanding for others, as well as helping us hone in on what we must do and what we did.
  + We went to TA OH and asked for feedback on how to improve our scores. She explained what we needed to do to improve.
* For the next 3 upcoming weeks Jon is busy during our scheduled meeting times, so we need to reschedule them. It is very important to meet with him in the next upcoming weeks because we will soon be presenting our proposal to him, as well as it being the initial stages of our implementation. These weeks are crucial in ensuring that we really understand what the client wants so that we do not make the mistake of building something that is not useful to him.
  + We already spoke at the last meeting, and he is very open to moving our meetings to earlier in the week, we as a group need to decide on a time and send it to him.
* Jon wants a lot of different features implemented in the scanning system and is constantly changing his mind/adding new features.
  + We already had Jon list out the most important features that he wants implemented during our last meeting. To ensure that we are all on the same page, we plan on having a final comprehensive list (ranked most to least important) of what features this system should have and present them to Jon during our next meeting.

**3. Goals / Targets for the Next Sprint**

* Update Kanban Board - From the information we gathered from our meeting with Jon this week, we have shifted our goals to focus more on researching pre-existing software solutions. As a result, we need to update our schedule accordingly so our next steps are clear. (Max, 30 mins)
* Continue to research existing solutions - We want to continue our research for existing solutions to help better understand what solution we will use during this project. If we come across a solution that we can implement, this will help us reduce the load on the implementation that we need to make. (Max, Shalini, and Blythe 3 hours each)
* Look into possible hardware solutions - We want to be able to find hardware solutions for the scanning systems (phone scanner, scanning device, etc.) since this will shape how we implement our solution in the upcoming weeks (Max, Shalini, Blythe, 2 hours each)
* Revise project proposal - Make revisions based on feedback we will receive from our last submitted proposal so that we have a finalized version that we can present to our client Jon (Max, Shalini, Blythe, 1 hour each)
* Meet with Jon - Discuss any progress that we have made in the past week and touch base with Jon to make sure that we are on the same page. (Max, Shalini, Blythe, 1 hour each)
* Add to research document - We need to take into account the new direction Jon wants us to go in and research more software options with an expanded inventory database capability. (Max, Blythe, Shalini, 2 hrs each)
* Create comprehensive feature list - Since our client slightly changed our direction with the project, we want to finalize a list of features (ranked from high to low importance) that we will run over one more time with Jon. This will give us a priority queue to begin working with when finding a software solution. (Max, Blythe, Shalini, 1 hr each)
* Create client meeting agenda - This was a successful task from last week that helped focus our meeting with Jon and made it more effective and efficient. (Shalini, 30 mins)

**4. Community Partner Relationship**

We have consistent weekly meetings with Jon Schubert where we ask him questions to help us gain a better general understanding of how the technology of his organization works and what he wants implemented/changed with the system. We have a good relationship with Jon as we meet and communicate on a regular basis with him. He has also been extremely helpful with answering any clarifying questions we may have and is quick to respond to any emails. Lastly, we have established common ground with him that his available hours are from 7am-3pm on week days and make sure to schedule meetings, send emails, etc. during that period of time.

We have also started conducting initial research on existing technology solutions and presented them to Jon to try to see what would fit into his budget as well as determine whether he wants a pre-implemented solution or for us to build a system from scratch.

Metrics:

Meeting 9.5/10 - We usually have consistent meetings once a week every Friday. However, Jon will be out of office for the next three Fridays but we have decided to shift our meeting days during this period to Mondays instead.

Responsiveness 10/10 - Jon is fast at replying to any questions we may have between his work hours, so we make sure to get any emails to him in that timeframe. (7am-3pm)

Productivity 10/10 - We started creating agendas for our weekly meetings so we have a set plan of what we need to discuss

Clarity 8/10 - When talking to Jon, he adds/changes new features that he would like to be implemented every week leading to possible scope creep. To help solve this issue, we had Jon rank the features he wanted implemented from most important to least important and we will create a comprehensive list to help us gain a better understanding on what we need to prioritize.