

Bubblescan Capstone Meeting Summary and Project Objectives

Participants:

- *Client:* Dr. Brian Woods
- *Tech Lead:* Raju Karmuri
- *C.S. Capstone Team:*
 - Ahmet Ali Yildiz
 - Myles Correa
 - Nischita Nannapaneni
- *A.I. Capstone Team:*
 - Ruthvik
 - Janardhan Karravula

Objective:

Our team set up a meeting with the client, Dr. Woods, as to receive some feedback regarding the progress we have made so far in our project, as well as clarity regarding its future functionality. We prepared some questions ahead of time that we wanted to ask Dr. Woods so that we could make sure we were delivering a product that suited his needs appropriately, making sure that everything that needed to be addressed was, and that nothing significant was neglected. We also used this opportunity to allow both capstone teams to check in with each other, to confirm that everyone is on the same page.

Summary:

In the meeting, Dr. Woods shared a couple of documents with us, a pdf of an example Scantron sheet and an excel file containing the digitized version of the data from said Scantron sheet. These were immensely helpful as it allowed us to better grasp the data that we are working with since we could see it represented so clearly. He explained his current routine of processing these Scantrons, and highlighted the issues or areas for improvement within it. Mainly, the fact that efficiency overall could be optimized. Also, he mentioned that there are only 2 Scantron processing machines on campus; evidence for the need of an external processing software such as Bubblescan.

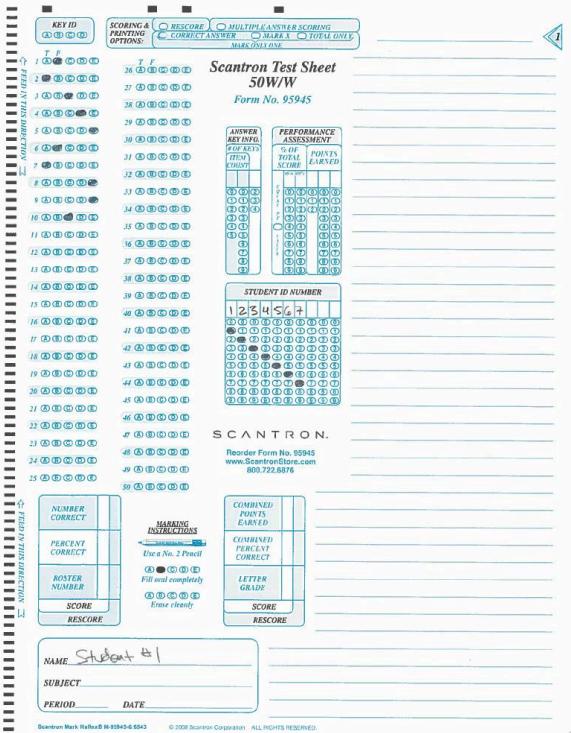
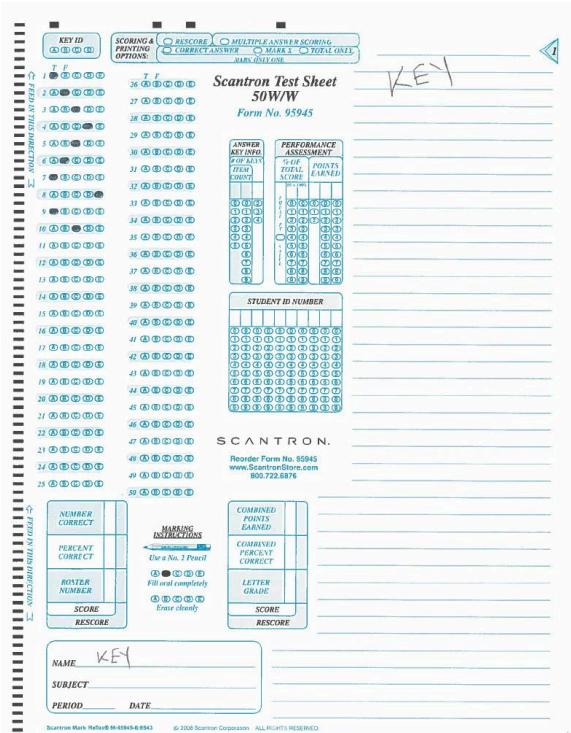
Discussion Points:

1. **Scope of Project:** The scope of the project involves developing a software solution to optimize the processing of Scantron sheets, addressing inefficiencies in Dr. Woods' current routine. This includes automating the data extraction process from the Scantron sheets provided by the user, processing the data using tools such as machine learning, and returning a result that is a more convenient version of the Scantron data.
2. **Data Provided:** Dr. Woods shared two key documents with the team: a PDF example of a Scantron sheet and an Excel file containing digitized data from the Scantron sheets. These documents provide valuable insight into the structure and format of the data that the team will be working with, facilitating a better understanding of the project requirements.
3. **Client Requirements:** During the meeting, Dr. Woods emphasized the need for a software solution that can streamline the processing of Scantron sheets and improve overall efficiency. He highlighted the limited availability of Scantron processing machines on campus and expressed the importance of an external processing software like Bubblescan to address this limitation. The client expects the software to be user-friendly, accurate, and capable of handling large volumes of data effectively.
4. **Capstone Team Recommendations:** Based on the discussion with Dr. Woods and the analysis of the provided documents, the AI Capstone Team recommends focusing on the following key areas.
 - a. Developing robust data extraction algorithms to accurately capture and digitize information from Scantron sheets, keeping as much information as possible.
 - b. Implementing features for batch processing and automation to improve overall efficiency and reduce processing time, while using a visual indicator as needed while the result loads.
 - c. Integrating Bubblescan or similar external processing software to complement the functionality of the developed solution and address the limited availability of Scantron processing machines on campus.
5. **Next Steps:**
 - a. Conducting a detailed analysis of the provided Scantron data to identify patterns and potential challenges.
 - b. Furthering development of the software solution, prioritizing features that align with the client's requirements and project objectives.

- c. Scheduling regular check-ins with the client to provide updates on the project progress and gather feedback for iterative improvements.
- d. Improving the “look” of the software to improve the user’s experience.

Attachments:

Scantron PDFs

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Excel file with processed Scantron data