# **Project Retrospective**

# CITS3200 Group 38

# **Purpose**

The purpose of this document is to reflect on the Global Mobility and Climate Vulnerabilities: OCR project as it currently stands to assess the project's progress and plan steps going forward to address challenges and improvements required to meet the goals of the project.

The software team will demonstrate the project as it currently stands to the Client in a demonstration meeting, where the minutes will record the team's and Client's thoughts about the system.

The second part records the team's thoughts (without the Client) about how the project is progressing versus the goals that were set and how the project is progressing regarding the timeline proposed in the team's timesheet.

### **Part 1: Demonstration and Client Feedback**

Date: 18/09/2024

Venue: Teams (Online)

### Attendance:

- William Forrest Stewart van den Wall Bake <23086983@student.uwa.edu.au>
- Shashwat Abrol <23482415@student.uwa.edu.au>
- Connor James Fernie <23443143@student.uwa.edu.au>
- Oliver John Dean <21307131@student.uwa.edu.au>
- William Sydney Lodge <22980141@student.uwa.edu.au>
- Ciaran David Petrus Engelbrecht <23169641@student.uwa.edu.au>

## **Apologies:**

- N/A

# **Absent:**

- N/A

# Meeting Opened at: 9:00am

**GUI Demonstration:** The team will demonstrate the graphical user interface as it currently stands to the client

- Oliver demonstrated the code and GUI as it currently stands, highlighting processes such as startup, adding PDFs, auto table detection tools.
- The Client asked if users could upload a whole document or if it must be a single page
- Oliver discussed future improvement of uploading a whole document, allowing it to be scrollable, and how it will impact the GUI
- The Client asked if it is easy to add columns at this stage of the process, and if it is useful to have a cropping tool to aid table detection
- Oliver demonstrated current implementation of cropping a table and plan to improve this feature
- Shashwat explained user intervention process of table detection stage in the GUI

**Command-line Demonstration:** The team will demonstrate the OCR extraction functionality as it currently stands to the client

- William Lodge demonstrated the OCR extraction functionality through the commandline
- William Bake explained the processes occurring in the OCR extraction
- Oliver explained the output of detected low confidence/errors in the OCR extraction process and future improvement of a visual indicator for this in the GUI.
- Client expressed that this way of indicating errors is very beneficial for the business workflow.
- William Lodge demonstrated opening and examining the output of the OCR process
- Client asked at what stage of the workflow will a user check the output accuracy
- Oliver explained the expected workflow in the GUI for correcting errors

#### Client Feedback – The team will then ask for feedback from the client

# 1. Client's overall thoughts about the system

Overall, the client was positive about the current state of the software and explained how the software is meeting current requirements at this stage of the project.

- i. The client expressed appreciation for the efforts from the team
- ii. The client stated that the software as an MVP can definitively meet the requirements of the project

# 2. Do the current features implemented meet your expectations?

- The client described how the current features meet expectations and how the team has been transparent and clear about the system as it stands, capabilities and limitations
- ii. Client described how the team has tried to push features to what can reasonably be done and have investigated the high priority features well
- iii. At the current stage the client understands receiving errors in the output from the software process

### 3. Are there features or functionalities that are missing from the system as it stands?

 The client expressed that there aren't any missing features/functionality from the software as it currently stands  Rather the client explained that ensuring the current features are implemented with quality is a higher priority than adding new features or functionality

#### 4. As the project progresses what are your highest priorities?

In general, the feedback from the client about the highest priorities moving into the next sprint of the project is that the team improve what has been currently implemented. Specifically, ensuring that the software can achieve the requirements of the project to a high degree of accuracy.

- The client expressed that the highest priority is the accuracy of the OCR extraction
- ii. Ensuring bugs and errors have been 'ironed out' of the software
- iii. Improving the cropping tool in the GUI
- iv. Auto table detection improved to increase user efficiency
- v. PDFs can be uploaded as a single document rather than needing to split it up into single pages

## 5. Suggestions for improvements

- i. Improving the accuracy of the OCR is the highest priority suggestion
- ii. The client also suggested ways of improving the cropping tool, and auto table detection tools in the GUI

### 6. How the Client Envisions the Next Stages of Development

- i. Oliver asked about how the client expects the timeline for the next sprint to go
- The client expressed that the team should focus attention on improving the current implementation and perfecting it before adding nice to have features
- iii. The client suggested having users test the software when the team feels it is ready to be used
- iv. The client explained that the team should not focus on user guides or extensive documentation as the client wishes to be involved in the process of development

**Team's Thoughts** – During the meeting the team will also record their thoughts about the system

### 1. Team's overall thoughts about the system and progress

- The team discussed being happy with how we are progressing with the project and has addressed the client's requirements well at this stage of the project timeline.
- Oliver described having a lot of time to improve the software due to the team working ahead of expectations
- Connor described the current software as being a suitable MVP that meets the basic requirements set out at the beginning of the project
- William Bake explained that the team has progressed greatly, and the software is ahead of expectations
- William Lodge described that the OCR extraction as demoed is performing faster than the expected time and is efficiently extracting text
- Shashwat described how the UI implemented is progressing well

### 2. Current challenges faced in the development on the software

- Will Bake discussed that a challenge in development of the software currently being faced is the automatic table detection, however, after the team has tried working on it, it may be in a best state currently
- Will Bake discussed performance expectations and challenges faced with user system specifications limiting the efficiency of the OCR processing times.
- The client discussed supplying higher powered machines to tackle this issue.

# 3. Plan to address Client feedback moving forward

- The client suggested having users test the software when the team feels the system is in a state that is ready for user testing
- This will provide essential feedback to the team
- The team discussed the future improvements that will be implemented as a response to the feedback provided during the demonstration
- The team agreed to continue weekly meeting to receive feedback from the client and iterate on the software during the next sprint

Meeting Closed at 9:52am

**Part 2: Team Reflection** – The team will record their thoughts about project progress (without the Client)

# **Team's Overall Thoughts About Project Progress**

The team is very happy about the current state of the project and the progress we have made since the beginning of the project throughout each sprint we have completed. Each member of the team has expressed how we have exceeded our expectations with the current state of the software we have developed.

In terms of the goals that were set to be completed during sprint 2, the team is on track to meet all the requirements defined by the client for the project. Of the nine user stories/goals that were set to be completed during sprint 2, the team was able to successfully achieve seven of them, with one of the goals being dropped during that sprint and another being shifted to sprint 3 due to being out of scope and not required for sprint 2. Therefore, the team is very happy about how the progress is tracking in terms of the goals set.

#### **Evaluation of Progress Versus Expectations from Timesheet**

The team assessed how the project is tracking regarding the expected timeline we set in the timesheet. Overall, the team has identified that we have made significant progress and are ahead of expectations.

While many of the goals and requirements have not been marked as completed, this is because they are large goals which can be contributed to over the entirety of the project. An example of this is the UI which has not been marked as completed at this stage, however, as indicated in the client retrospective, the current implementation is suitable and meets the client's expectations at this stage. Therefore, the team believes we have made significant progress.

### 1. Observations

- a. What went well
  - The team is tracking well compared to the estimated time spent on the projects versus the budgeted time spent on the project as we are with 97.5 hours of the groups chosen time budget of the project
  - The team has not dropped any significant requirements thus far in the project which is evidence that we are progressing well with the project requirements.
  - The team is happy with our methods of communication and our response to client feedback. The team's positive response to client feedback can be demonstrated in the meeting minutes for the client retrospective as the client stated the software is meeting the client's expectations
- b. What did not go well
  - The initial time estimated compared to the actual time spent taken from week 4 shows that we exceeded our time budget at that stage of the project
  - The team has had some issues in task assignment during meetings with some team members not receiving enough tasks which may explain some requirements not being fully completed at this stage of the project
  - In weeks two and four the team exceeded the budgeted time for that week.

## 2. Discrepancies

- a. Identification of discrepancies
  - Team exceeded the budgeted time up until week 4 of the project with weeks
    2 and 4 greatly exceeding expectations for actual time spent on the project
  - Some requirements not completed yet, while progress has been great, these requirements could potentially have been 100% completed by this stage of the project
- b. Suggested reasons for discrepancies
  - The team greatly underestimated the time we would spend on research, investigation, documentation and administrative tasks during the first sprint of the project. As indicated by the exceeded time budgets we spent a lot more time on these aspects of the project than we expected. This could be because we generally didn't have an understanding about how long such documentation could take to develop and required a lot of investigation at the beginning of the project by each team member.
  - The team also had issues during the project toward the end of sprint two where a team member was not assigned tasks for between 2 group meetings which may have resulted in a loss of progress.
  - The team also has been working very individually on different components and functionalities of the project which may explain why parts of the requirements have not been fully complete yet, even though we are achieving client expectations and making great progress.

#### 3. Improvements to be Made

The team discussed what improvements should be made to our processes as we move forward into the next sprint of the project and identified two main areas for improvement:

#### 1. Task assignment

As discussed above, the team ran into issues where tasks have not been assigned effectively to group members in the project which may contribute to slower progress.

### 2. Communication

As discussed above, the team has been working individually on different aspects of the project which has resulted in some team members working on the same functionality of the software meaning we are producing redundant work and has resulted in different parts of the software not working together at the current stage.

## 4. Process Going Forward

The team discussed how we may improve as we progress with the project and identified two problem areas where we should focus our attention on improving. To improve how we assign tasks, the team will continue with our approach to reporting individual progress at each team meeting, however, will make more of an effort to ensure that all team members have enough work to do and that we reassign team members to tasks more effectively. We can do this by reviewing progress and comparing it to the current

client priorities for the software, so we are constantly working on high priority areas of the project. To address the issue of communication the team has agreed to communicate more effectively, especially when working on the same aspects of the software such as the UI. We will continue to have a weekly meeting with the team but will increase our communication between meetings to improve this issue.

Overall, the consensus agreed upon by the group is that we are making great progress and are ahead of our own and our client's expectations. We have identified problem areas in our team's processes which has been a factor in the discrepancies identified in our goals and timesheets versus how the project is tracking and will work to improve in these areas to ensure the successful delivery of the project.