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| Project Closure Report | |
| Purpose: This report should be completed at the end of a project. | |
| Project Name | Restaurant Management System |
| Project Team | Team 30 |
| Company Name | Plus84 |
| Company Contact | projectsgroup17@gmail.com |
| Project Actual Start Date | September 23rd , 2019 |
| Project Actual End Date | April 6th, 2020 |
| Reason for Project Closure | End of academic term |
| Client Acceptance Date | N/A |
| Project Description | Restaurant management by manager or staff member are task with their unique difficulties and problems such as their harsh workflow of order, staff, inventory, sales, schedule management…etc. As to these individual problems, there are applications in the market that help accomplish them but very time-consuming progress when put it all together. What we are planning to do is simplifying and combining all these individual functionalities into one, web application, while adding some improved features to improve the management. In all around this project is to help restaurant management spend less time on managing restaurant so that they can focus on developing and expanding their business. |

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| Closure Activity Confirmation | | |
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| **Item** | **Confirmation** | **Comments** |
| **Project Considered a Success** | Yes  No  N/A | Our team had planned to celebrate this success together with a small party. However, during this pandemic, social distancing is something that we have to obey and thus our plan to celebrate will be postponed until everything gets back to normal. |

| Release of Hardware / Software | | |
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| Item | Description | Release Date |
| Mobile Version | Release the Android version of our application | 2020-03-31 |
| Business Website | Release the official business website of our application | 2020-04-02 |
| Web Version | Release the official website of our application | 2020-04-04 |

| Project Archival List | | | | |
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| Project Deliverables Report | | | All the documentations and project files are kept under this repository  <https://github.com/tylrtnguyen/CapstoneProject> | |
| # | File / Email Description | Document Location | | Storing Media (Hardcopy/Softcopy) |
| 1 | All the documentations and project assets | <https://github.com/tylrtnguyen/CapstoneProject/tree/master/Project_Documentation> | | Softcopy |
| 2 | Mobile Version Prototype | <https://www.figma.com/file/Hq5VkkVJbeT4W7sXJJO21t/T30_MockUp_MobileVersion> | | Softcopy |
| 3 | Web Version Prototype | <https://www.figma.com/file/4ziukeKzoys3Tio2YA9W5i/T30_Mockup_WebVersion> | | Softcopy |

| Re-usable Component / Tools Developed | | |
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| # | Re-usable Component / Tools Name Description | File Name |
| 1 | Our REST API can be used for other projects that have some similarities with what we are doing | ResTaskest REST API |
| 2 | Mobile Version Prototype can be used for similar apps in the industry | Mobile Version Prototype |
| 3 | Web version Prototype can be used for similar apps in the industry | Website Version Prototype |
| 4 | The Stripe API integration tool can be implemented to other projects such as e-commerce | Stripe API Integration |

| Project Value/Benefits | | |
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| Provide a summary of the value/benefits of this project and indicate whether they have already been realized or will be realized in the future. | | |
| # | Value/Benefit | Realized / Future |
| 1 | Help restaurant manager to simplify the process of managing physical resources and human resources | Realized |
| 2 | Assist employees in interacting with managers and other employees to create a smooth workflow | Future |
| 3 | Help restaurant manager and owner to create a better development plan for their business based on the data that the system collects and portrays using charts | Future |

| Lessons Learned | |
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| Include any technical, managerial lessons learned, preventative measures for issues faced, and aspects of the project that had a positive impact on the success of the project. | |
| # | Description / Explanation of Lesson Learned |
| 1 | One of the most valuable lessons that we learned when developing this project is dealing with Google App Engine Terms of Service. As stated in the project plan, we opted to use Google App Engine to host our REST API, but we unfortunately violated the rules of Google by exposing the API KEY of our system on Github when deploying our application. As a result, our server had been suspended for 4 days and we had to migrate our server to Heroku instead |
| 2 | Another lesson is to pick the right technology for the project when planning. As we develop our application, we realized that things could be much easier if we could pick a cross-platform Framework that uses only one code base for both website and mobile such as Ionic. |
| 3 | Dealing with third-party services is also a headache when building this project, most of the third-party APIs on the market right now are paid services and thus they are not quite appropriate for a school project like what we are doing. We, honestly, did not research carefully to deal with this situation. Fortunately, we can still find other ways to get our tasks done. |

| Best Practices | |
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| Identify any innovative methods, techniques, processes developed, as well as any other best practices used on the project. | |
| # | Description of Best Practice |
| 1 | For mobile developers in our team, since NativeScript is a new tool that we have never had any experience to work with it before, everything that we do in this project is about learning experience. We learn how to create a fully functional mobile application that has a good-looking UI and an appropriate UX and a good connection with the backend. |
| 2 | For business website developers in our team, learning how to integrate the Stripe API to handle user payment is one of the most valuable things that we could ever learn before going to work in real projects in the industry. A lot of projects, nowadays, have some kind of payment handling processes, and Stripe API is really well-known for solving that task. Therefore, knowing how to integrate Stripe API to the system is a really good learning experience |
| 3 | For the website version of application, this part is considered the key of the application because this project is developed to work most efficiently on web platform. Being able to build a dashboard that has charts and bring a sufficient summary to the client is the key things of this application. Hence, many third-party libraries are used in the web version in order to deliver the best user experience for client, and solve the restaurant tasks quickly and smartly |

| Prepared By | | | | |
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| **Project Team** | Team 30 2020-04-10 | | | |
| Thong Ba Nguyen Thong 2020-04-10 | | | |
| Handover Approvals | | | |  |
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| **Stakeholder/Industry partner Name and Title** | | Thong Ba Nguyen – Project Manager 2020-04-10 |  | |
| Thong Ba Nguyen 2020-04-10 |  | |
| **Comments**: Our project manager will represent to sign in this section since we do not have any stakeholder or industry partner | | | |  |

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| Project Closure Approval | |
| **Stakeholder/Industry partner Name and Title** | 2020-04-10 |
| (signature) (date) |
| Thong Nguyen – Project Manager | Thong Ba Nguyen 2020-04-10 |

Document Reference: www.ocio.gov.nl.ca/OCIO/pmo/docs/**project\_closure\_report**\_template.docx