## Project 1 & 2

**Scenario:**

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| Miss. Rachel runs a catering service “Delicious-Catering”. Her food is very famous in Gauteng. People order food from her for different events namely baptism, wedding, year-end functions, birthday (with and without theme) parties etc. Usually, she takes booking directly from the client. Due to the current pandemic situation, she can’t directly take the booking. This is making her think about an online booking system for her catering service.  She takes only one booking per day. She caters food at the venue. If any client requests to decorate the venue she does that according to the client’s recommended theme. Once the booking has taken place she gives a booking number. The client can confirm the booking 15 days prior to the event by giving 50 % of the calculated total price. If the total number of people is above 40 there is a 15% discount from the calculated total adult's meal price. The client can update the selected food menu before booking confirmation.  As a software engineering student, you are assigned to develop a booking system for her. She usually asks a few questions to the client during the booking. It is mandatory from her side to include a few questions to which the client can answer easily. Questions are given below in the form of requirements. | |
| **Basic requirements are :** | |
|  | The client must be able to register into the system with required details such as name, surname and phone number etc. The client should be able to answer the questions.  Her basic questions are:   1. Type of event? Wedding/ birthday parties etc. 2. Event date and time? (The system must check the availability of the date.) 3. Event venue address? Capture details including phone number 4. The total number of people? How many kids and adults? 5. Food- selection from the menu (Adults Meal- Kids Meal- Drinks- Dessert etc.) 6. Any decorations? If the answer is yes ask additional questions.   Miss. Rachel should be able to see all her bookings, see all confirmed/non confirmed bookings etc. She prefers the proposed system must generate a booking number so the client can check the status of the booking or can update the menu.  The system must send a notification to the client once the booking is confirmed by Miss. Rachel. She also expects a notification if the client makes any changes in the order. |
| Miss. Rachel could come up with only the above requirements. As a software developer, you have to identify the missing information and incorporate it during application development and then make the system more functional and user friendly. | |

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| **Develop the solution for the above scenario in two phases.** | |  |
| Phase 1 | | [30] |
|  | In phase 1 analyse the scenario and identify the required business logic classes, interfaces, abstract classes etc. Create the **Business Logic Layer** and ***Data Access Layer*** with relevant classes and class members which will fulfil the functional requirements. As a group, you are to collaborate on this project in order to demonstrate ***Version Control*** in NetBeans or VS Code, using ***Git*** and ***GitHub***. You are to create a single GitHub account, which all members of your group will access from their personal Git wrokspaces and collaborate to demonstrate Version Control. Members should be able to make ***commits*** and send ***pull*** and ***push*** requests to and from the GitHub repository, and you can assign a unique name to the repository (name should ressemble yourself as a group). On this repository, make sure you have two branches, ***Master*** and ***Develop*** branches. Each branch should contain a ***Multi Layered Architecture*** of your project, which should include your **Business Logic Layer** and ***Data Access Layer*** files for phase 1. Make sure you work on your develop branch first, before merging to your master branch. Include the ***url*** of your repository and submit on a word file, together with your solution for Phase 1. |  |
| Phase 2 | | [40] |
|  | In phase 2 develop the complete solution with ***Presentation Layer***. You are to include the Presentation Layerinto your Master and Develop branches on your repository. Make sure you work on your desktop branch first, before merging to your master branch. You are again supposed to Include the ***url*** of your repository and submit on a word file, together with your solution for Phase 2. |  |
| **NOTE**: Phase 1 and Phase 2 will be considered as Project 1 and Project 2 respectively. | |  |

## Additional Information

* All work must be done on your own. Belgium Campus have software that can **scan for plagiarism** and a student caught doing this will get 0 for this assignment.
* Late assignments will not be accepted; missing the deadline is an automatic 0.

## Rubric

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| Mark Allocation | |
| Criteria | **Marks** |
| Phase 1 | **[30]** |
| Business Logic Layer and Data Access Layer Solution | 20 |
| Version Control | 10 |
| Phase 2 | **[40]** |
| Presentation Layer Solution | 30 |
| Version Control | 10 |
| Total: | **[70]** |