**Covid19 – Report**

* This application gives a Covid -19 pie chart report based on each country affected, recovered and Death.
* The access database is used to store the and retrieve the values of each country’s covid -19 report.
* Based on the selected date and selected country chart will be displayed and there is option to display all country chart based on the selected dates.
* Getting the values from database and pie chart drawing part has been done in the exe.
* Calculation part for the PIE chart is done using DrawingDLL.dll which will link statically.

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| Class | Functions | Explanation |
| CAssignmentDlg | Initialize | To initialize all require data to draw the pie chart |
| APICall | To get the calculated values from the DLL |
| CreateClientArea | To create a client area on the dialog to draw pie chart |
| SetTimer | To refresh the content for every 2 minutes |
| FillCountries | To fill countries to the combo box |
| OnBnClickedUpdate | To update the pie chart |

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| Class | Functions | Explanation |
| CPieChartWnd | DrawLabels | To draw the labels of pie chart |
| GetBoundRect | To calculate area bounded by client area |
| CalculateLabelRect | To calculate client area |
| DrawPieChart | To draw the Pie chart |
| RemoveItem | To remove drawn pie chart |

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| Class | Functions | Explanation |
| CDatabase | GetPieDetails | This will fetch all details needed to draw the pie chart |
| GetCountriesName | Fetches all countries name |
| IntializeDatabase | To initialize the database |
| DrawPieChart | To draw the Pie chart |
| RemoveItem | To remove drawn pie chart |

Drawing DLL

File – APICall.h – Contains exposed function to the out world.

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| Class | Functions | Explanation |
| CPieCalculation | GetValuesForPie | This will get the require data to calculate the points to draw pie chart |
| UpdatePieChart | Calculate the angle and percentage to draw pie chart |
| CalculateShape | Receive the data from GetValuesForPie |
| InsertItem | Calculated point inserted to Map |

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| Class | Functions | Explanation |
| CShapeClient | Create | Gives the proper class object to calculate the points for shape. |

ShapeInterface.h – This is an interface to get the class from the factory based on the input type.