

**B. Tech. (CSE) – 7<sup>th</sup> Semester  
Batch 2018-22**

## **Project Work**

### **Covid Tracker**

**Project Number- 22**

**Project Guide - Dr. Dinesh Kumar Verma**

#### **Details of Project Batch-**

#### **Weekly Meeting Schedule (with supervisor)-**

	<b>Day</b>	<b>Timings</b>
<b>1<sup>st</sup> Meeting of the week</b>	Monday	4:30 PM
<b>2<sup>nd</sup> Meeting of the week</b>	Thursday	4:30 PM

**Signature of Project Guide:**

<b>Week Number- 01</b>		<b>Date</b>	<b>From – 25-08-2021</b>	<b>To — 28-08-2021</b>
<b>Project Batch Size-</b>				
<b>Er. No.</b>	<b>Name of Project Mem</b>			
181B029	Aman Verma			
181B210	Shubham Tiwari			
<p align="center"><b>Task Assigned By Supervisor-</b></p> <p>Submit the project approval along with a brief description of the work that will be done and the tech stack that will be used to develop the project.</p>				
<b>Supervisor's Signature</b> <small>(while Assigning task)</small>				
<b>Date of task allocation-</b>				
<p align="center"><b>Brief report on achievement by student-</b></p> <p>Project approval has been submitted along with a brief description of the work and the tech stack that will be implemented.</p>				
<b>Report of Supervisor-</b>		<b>Satisfactory/ Not Satisfactory/.....</b>		
<b>Remarks / Instructions:</b>				

<b>Supervisor's Sign.</b> (1st meeting of week)	<b>Date</b>	<b>25-08-2021</b>
<b>Supervisor's Sign.</b> (2nd meeting of week)	<b>Date</b>	<b>28-08-2021</b>

<b>Week Number-</b>	<b>02</b>	<b>Date</b>	<b>From – 30-08-2021</b>	<b>To — 04-09-2021</b>
<p align="center"><b>Task Assigned By Supervisor-</b></p> <p>Begin working on the project by doing the requirement analysis and preparing a list of all the features that will be put into the project.</p>				
<b>Supervisor's Signature</b> (while Assigning task)				
<b>Date of task allocation-</b>				
<p align="center"><b>Brief report on achievement by student-</b></p> <p>Requirement analysis has been done and a small list of all the important features the project will include has been prepared.</p>				
<b>Report of Supervisor-</b>		<b>Satisfactory/ Not Satisfactory/.....</b>		
<b>Remarks / Instructions:</b>				
<b>Supervisor's Sign.</b> (1st meeting of week)		<b>Date</b>	<b>30-08-2021</b>	
<b>Supervisor's Sign.</b> (2nd meeting of week)		<b>Date</b>	<b>04-09-2021</b>	

<b>Week Number-</b>	<b>03</b>	<b>Date</b>	<b>From – 06-09-2021</b>	<b>To — 11-09-2021</b>
<p align="center"><b>Task Assigned By Supervisor-</b></p> <p>Prepare the Use case and ER diagram along with a flowchart.</p>				
<b>Supervisor's Signature</b> (while Assigning task)				
<b>Date of task allocation-</b>				
<p align="center"><b>Brief report on achievement by student-</b></p> <p>Created a Use case diagram and an ER diagram with well defined relationships</p>				
<b>Report of Supervisor-</b>		<b>Satisfactory/ Not Satisfactory/.....</b>		
<b>Remarks / Instructions:</b>				
<b>Supervisor's Sign.</b> (1st meeting of week)		<b>Date</b>	<b>06-09-2021</b>	
<b>Supervisor's Sign.</b> (2nd meeting of week)		<b>Date</b>	<b>11-09-2021</b>	

<b>Week Number-</b>	<b>04</b>	<b>Date</b>	<b>From – 13-09-2021</b>	<b>To — 18-09-2021</b>
<p align="center"><b>Task Assigned By Supervisor-</b></p> <p>Learn the required technologies for the project while also searching for useful libraries</p>				
<b>Supervisor's Signature</b> <small>(while Assigning task)</small>				
<b>Date of task allocation-</b>				
<p align="center"><b>Brief report on achievement by student-</b></p> <p>Started researching about various useful libraries with the capability of statistical representation and started learning react for the project but the complexity level was a bit high so we had to go do the basics again due to which we could not start working with react</p>				
<b>Report of Supervisor-</b>		<b>Satisfactory/ Not Satisfactory/.....</b>		
<b>Remarks / Instructions:</b>				
<b>Supervisor's Sign.</b> <small>(1st meeting of week)</small>		<b>Date</b>	<b>13-09-2021</b>	
<b>Supervisor's Sign.</b> <small>(2nd meeting of week)</small>		<b>Date</b>	<b>18-09-2021</b>	

<b>Week Number-</b>	<b>05</b>	<b>Date</b>	<b>From – 20-09-2021</b>	<b>To — 25-09-2021</b>
<p align="center"><b>Task Assigned By Supervisor-</b></p> <p>Start searching for APIs that can provide with fresh Covid-19 data.</p>				
<b>Supervisor's Signature</b> <small>(while Assigning task)</small>				
<b>Date of task allocation-</b>				
<p align="center"><b>Brief report on achievement by student-</b></p> <p>We have begun searching for Covid-19 data APIs but given that this is being done in the month of September and Covid cases are on a decline, a lot of services have discontinued their APIs and we are getting stale data from these resources. However one resource was found with fresh data, but there was some internal problem on the backend side causing the data to not get parsed correctly.</p>				
<b>Report of Supervisor-</b>		<b>Satisfactory/ Not Satisfactory/.....</b>		
<b>Remarks / Instructions:</b>				
<b>Supervisor's Sign.</b> <small>(1st meeting of week)</small>		<b>Date</b>	<b>20-09-2021</b>	
<b>Supervisor's Sign.</b> <small>(2nd meeting of week)</small>		<b>Date</b>	<b>25-09-2021</b>	

<b>Week Number-</b>	<b>06</b>	<b>Date</b>	<b>From – 27-09-2021</b>	<b>To — 02-10-2021</b>
<p align="center"><b>Task Assigned By Supervisor-</b></p> <p>Resolve the problem with the data parsing on the backend.</p>				
<b>Supervisor's Signature</b> <small>(while Assigning task)</small>				
<b>Date of task allocation-</b>				
<p align="center"><b>Brief report on achievement by student-</b></p> <p>The problem was posted in one of the forums on the internet regarding the data not getting parsed correctly and the response was to use “fetch” method instead of “https” module to parse the data. The problem has since been resolved but for the time being we are going with the stale data as per our guide's approval and for testing purposes.</p>				
<b>Report of Supervisor-</b>		<b>Satisfactory/ Not Satisfactory/.....</b>		
<b>Remarks / Instructions:</b>				
<b>Supervisor's Sign.</b> <small>(1st meeting of week)</small>		<b>Date</b>	<b>27-09-2021</b>	
<b>Supervisor's Sign.</b> <small>(2nd meeting of week)</small>		<b>Date</b>	<b>02-10-2021</b>	



<b>Week Number-</b>	<b>07</b>	<b>Date</b>	<b>From – 04-10-2021</b>	<b>To — 09-10-2021</b>
<p align="center"><b>Task Assigned By Supervisor-</b></p> <p>Find a library for statistical data representation.</p>				
<b>Supervisor's Signature</b> <small>(while Assigning task)</small>				
<b>Date of task allocation-</b>				
<p align="center"><b>Brief report on achievement by student-</b></p> <p>We found a library called chart.js which was found best for statistical representation of data. We have started reading the docs and implementing the samples to get a better sense of the workings of the library.</p>				
<b>Report of Supervisor-</b>		<b>Satisfactory/ Not Satisfactory/.....</b>		
<b>Remarks / Instructions:</b>				
<b>Supervisor's Sign.</b> (1st meeting of week)		<b>Date</b>	<b>04-10-2021</b>	
<b>Supervisor's Sign.</b> (2nd meeting of week)		<b>Date</b>	<b>09-10-2021</b>	

<b>Week Number- 08</b>	<b>Date</b>	<b>From – 18-10-2021</b>	<b>To - 23-10-2021</b>
<p align="center"><b>Task Assigned By Supervisor-</b></p> <p>Integrate the API of the library with the Covid-19 data API to test if the graphs are correctly being displayed or not.</p>			
<b>Supervisor's Signature</b> <small>(while Assigning task)</small>			
<b>Date of task allocation-</b>			
<p align="center"><b>Brief report on achievement by student-</b></p> <p>We tested the Covid-19 data API with that of chart.js and found the graphs were being correctly displayed both in line and bar graph format. Other formats such as doughnut and pie chart were also tested but due to some shortcomings of the library, they could not be displayed properly so we will not be giving the option to view data in that format.</p>			
<b>Report of Supervisor-</b>		<b>Satisfactory/ Not Satisfactory/.....</b>	
<b>Remarks / Instructions:</b>			
		<b>Date</b>	<b>18-10-2021</b>
<b>Supervisor's Sign.</b> <small>(1st meeting of week)</small>		<b>Date</b>	<b>23-10-2021</b>
<b>Supervisor's Sign.</b> <small>(2nd meeting of week)</small>		<b>Date</b>	<b>23-10-2021</b>

<b>Week Number-</b> <b>09</b>	<b>Date</b>	<b>From –</b> <b>25-10-2021</b>	<b>To – 30-10-2021</b>
<p align="center"><b>Task Assigned By Supervisor-</b></p> <p>Prepare the presentation</p>			
<b>Supervisor's Signature</b> <small>(while Assigning task)</small>			
<b>Date of task allocation-</b>			
<p align="center"><b>Brief report on achievement by student-</b></p> <p>We prepared the presentation and attached the screenshots depicting the basic functionality of the project which is the hover to get data about the cases.</p>			
<b>Report of Supervisor-</b>		<b>Satisfactory/ Not Satisfactory/.....</b>	
<b>Remarks / Instructions:</b>			
<b>Supervisor's Sign.</b> (1st meeting of week)		<b>Date</b>	<b>25-10-2021</b>
<b>Supervisor's Sign.</b> (2nd meeting of week)		<b>Date</b>	<b>30-10-2021</b>

<b>Week Number- 10</b>	<b>Date</b>	<b>From – 08-11-2021</b>	<b>To – 13-11-2021</b>
<p align="center"><b>Task Assigned By Supervisor-</b></p> <p>Start with the remaining work and incorporate a predictive model</p>			
<b>Supervisor's Signature</b> <small>(while Assigning task)</small>			
<b>Date of task allocation-</b>			
<p align="center"><b>Brief report on achievement by student-</b></p> <p>The work on getting the number of cases by state name has been started. For this purpose, we have included a form element on the frontend that will send the state name as a post request to the server which will then export the state name to another module which will then parse it and display the required data on the frontend. We have also started searching libraries in javascript having predictive capabilities.</p>			
<b>Report of Supervisor-</b>		<b>Satisfactory/ Not Satisfactory/.....</b>	
<b>Remarks / Instructions:</b>			
<b>Supervisor's Sign.</b> <small>(1st meeting of week)</small>	<b>Date</b>	<b>08-11-2021</b>	
<b>Supervisor's Sign.</b> <small>(2nd meeting of week)</small>	<b>Date</b>	<b>13-11-2021</b>	

<b>Week Number- 11</b>	<b>Date</b>	<b>From – 15-11-2021</b>	<b>To – 20-11-2021</b>
<p align="center"><b>Task Assigned By Supervisor-</b></p> <p>Search for libraries with predictive capabilities</p>			
<b>Supervisor's Signature</b> <small>(while Assigning task)</small>			
<b>Date of task allocation-</b>			
<p align="center"><b>Brief report on achievement by student-</b></p> <p>We tried to research predictive models that can make predictions of upto 7 days for a particular state. The algorithm we decided to use is the Linear Regression algorithm. The library we found was Tensorflow.js however given the time constraints and too many dependencies already creating trouble due to some internal clashing, we have decided to avoid it and instead go with the formula for regression. If time permits, and all the errors are resolved, we might incorporate it in the future.</p>			
<b>Report of Supervisor-</b>		<b>Satisfactory/ Not Satisfactory/.....</b>	
<b>Remarks / Instructions:</b>			
<b>Supervisor's Sign.</b> (1st meeting of week)	<b>Date</b>	<b>15-11-2021</b>	
<b>Supervisor's Sign.</b> (2nd meeting of week)	<b>Date</b>	<b>20-11-2021</b>	

<b>Week Number- 12</b>	<b>Date</b>	<b>From – 22-11-2021</b>	<b>To – 27-11-2021</b>
<p align="center"><b>Task Assigned By Supervisor-</b></p> <p>Resolve internal errors internal conflicts among the dependencies</p>			
<b>Supervisor's Signature</b> <small>(while Assigning task)</small>			
<b>Date of task allocation-</b>			
<p align="center"><b>Brief report on achievement by student-</b></p> <p>We looked at the error messages closely and found them to not be caused by dependencies but instead of similar function and variable names at some places. The error has been resolved but some new errors have caused the graph to disappear altogether.</p>			
<b>Report of Supervisor-</b>		<b>Satisfactory/ Not Satisfactory/.....</b>	
<b>Remarks / Instructions:</b>			
<b>Supervisor's Sign.</b> (1st meeting of week)		<b>Date</b>	<b>22-11-2021</b>
<b>Supervisor's Sign.</b> (2nd meeting of week)		<b>Date</b>	<b>27-11-2021</b>

<b>13</b>	<b>Date</b>	<b>From – 29-11-2021</b>	<b>To – 03-12-2021</b>
Task Assigned By Supervisor-			
Work on getting the graph to be displayed again			
Supervisor's Signature <small>(while Assigning task)</small>			
Date of task allocation-			
Brief report on achievement by student-			
<p>We tried deleting the possible conflicting variables and removing some dependencies which might be causing errors but the issue couldn't be resolved. Also, the data is not being exported to external files due to improper file structure. However, testing the same file structure in a separate project is showing proper results. We are guessing that the errors are being caused by using "import" statements instead of "require" statements. This was suggested by someone in one of the forums where the query was posted in.</p>			
Report of Supervisor-		Satisfactory/ Not Satisfactory/.....	
Remarks / Instructions:			
Supervisor's Sign. (1st meeting of week)	Date	29-11-2021	
Supervisor's Sign.(2nd meeting of week)	Date	03-12-2021	

<b>14</b>	<b>Date</b>	<b>From – 05-12-2021</b>	<b>To – 10-12-2021</b>
<p align="center"><b>Task Assigned By Supervisor-</b></p> <p>Try to switch the statements from import to require</p>			
<b>Supervisor's Signature</b> <small>(while Assigning task)</small>			
<b>Date of task allocation-</b>			
<p align="center"><b>Brief report on achievement by student-</b></p> <p>We have switched the statements from “import” to “require” to import the modules and made some changes in the package.json file to revert back to the original model and some issues have been resolved.</p>			
<b>Report of Supervisor-</b>		<b>Satisfactory/ Not Satisfactory/.....</b>	
<b>Remarks / Instructions:</b>			
<b>Supervisor's Sign.</b> <small>(1st meeting of week)</small>		<b>Date</b>	<b>05-11-2021</b>
<b>Supervisor's Sign.</b> <small>(2nd meeting of week)</small>		<b>Date</b>	<b>12-11-2021</b>



<b>15</b>	<b>Date</b>	<b>From – 12-12-2021</b>	<b>To – 17-12-2021</b>
<p align="center"><b>Task Assigned By Supervisor-</b></p> <p><b>Finish the project</b></p>			
<b>Supervisor's Signature</b> <small>(while Assigning task)</small>			
<b>Date of task allocation-</b>			
<p align="center"><b>Brief report on achievement by student-</b></p> <p><b>After switching from “import” to “require” statements and making some changes to the package.json file a lot of errors were resolved, however not all of them were eliminated, so to bring back the project to a working state, we switched back to the original version, without the predictive model and where the graph is being displayed by the statenames.</b></p>			
<b>Report of Supervisor-</b>		<b>Satisfactory/ Not Satisfactory/.....</b>	
<b>Remarks / Instructions:</b>			
<b>Supervisor's Sign.</b> <small>(1st meeting of week)</small>		<b>Date</b>	<b>12-12-2021</b>
<b>Supervisor's Sign.</b> <small>(2nd meeting of week)</small>		<b>Date</b>	<b>17-12-2021</b>
