**General description of what I worked on**

During my last 4 months I worked on Terminal Management System which I was assigned to develop the UI pages and backend from ground-up. The TMS is part of the main project called EBT system which we have been developing the product for State of California. The whole project is developed with all modern web and mobile technologies in frontend and latest backend java-stack frameworks. For TMS I used modern single page application technologies along with REST services in backend. I used Google backed Material UI with react with the latest state management RADIX technology. In TMS agency user can search for Terminals, update Terminal information, add new users to Terminal and delete users. Each part has its own relative page but they are all in one single page application. For example if the user wants to search for any terminal installed in some county, I allowed them search for under some categories like county level search, state level search, active-inactive terminals and so on. Similarly in adding new users page there will be multiple reactive forms with the beautifully designed material-ui components for user information input. During this processes I also created our company specific reusable material-ui components like header-navs, search components, so next any developer who wants to develop can use my reusable components which are already designed such a way that their color pattern matches to our company color code. Of course, I have to mention my latest web application course that was my last course I took online during summer. The course taught us from the beginning CSS, vanilla javascript and html to the advanced level like modern jquery ui libraries. Even if I use modern material-ui framework to the most of the job for UI I still relied on CSS+Javascript to modify all the web components in order to comply with our company policies and color code. One of the worth mentioning technology is Jquery-ui, I am thankful to the course that because it gave me an opportunity to have academic experience with jquery and at the same time I found out that applying jquery-ui to some of the components would be the best decision.

Another recent project I had worked on was Merchant Contract Form, it was a rather simple project which in UI user (logged on merchant) can see the link to the contract form before signing up for any contract and link should load the specific contract form that use are allowed to enroll. So most of the work was done in backend with old struts 1.1 framework. Because it was part of the Merchant Portal we have been developing for State of Nevada where the whole project was written in struts 1.1 with our legacy merchant portal support. For this post of the work done in plain java and following the struts action delegation support. Truth be told sometime I prefer to refer to lecture and lab material form MUM which I had studied during the first course we all take in MUM. So I used all material from MUM to refresh my knowledge in Java in couple hours and constantly refer to lab works for further improvement of my java experience.

Currently I am working on Retailer Portal which is a brand new single page application with all the modern frontend and backend technology stacks. A brief description of my part in this project was managing the merchant disputes on deposits they made over transactions. Basically retailer can look for transactions from history and if he finds any wrong deposits he can raise a dispute over this transaction. Each deposit will be made on particular deposit on particular date, so there is a list of deposits on particular date. This single page application have two parts: the retailer can see the list of deposits with each deposit has link to create a dispute over it and if the create a dispute link is clicked it goes to creating a dispute form. For this SPA I also used material-ui with react and used web service to get the list transaction from one resource and to create a dispute from another resource which is called DataNavigator API. During this project I am still feeling to brush pu my css and javascript coding skills with the materials from MUM where I took the web application developments course online and java programming course and Database Management course that I am currently studying. Because I made a lot of changes to web API s database connection and provided data retrieval and update queries.

**Here are the courses (and concepts/topics within the courses) that helped me during my work:**

1. **Web Application Development:**

Since I am fullstack developer and most of the time working as frontend developer I rely on legacy and new modern web technologies. By only knowing and having some experience with only modern technologies is not enough because the basis are CSS, plain javascript and HTML. What I learned from this course: I went back to foundations of frontend technologies both theoretically and practically and brushed up my knowledge on all the fundamentals of how web pages are rendered with CSS and HTML and actions are made with javascript. Amazing part is I am using these in real practice at work as well which feels like I am learning the theories and doing labs and at work utilizing them in real life application with modern frameworks and applications.

1. **Algorithms course:**

We have a coding challenge every two weeks and it is held at our company and we play individually against any developer. The good thing is there are prizes from $100 to $500. So far I won over $1000 in these competitions. So, why it is related to MUM? Because this competition is all about using my algorithmic knowledges in competition against my teammates including senior, junior developers at work in front of all project managers and having fun with people at work. This course was the last on campus course that I took and completed with good grades. I still keep all lecture notes and lab challenge sheets and works, I refer to them before going to the coding challenge at work and it always helps me to win most of the times.