**Chapter 10 – Team Project - Planning for Distribution**

*Submit this document with your answers. Do not change the order of the questions. Do not remove anything from this document. Do not create a new document. Provide your answers inline. Failure to submit this document will result in no credit.*

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Read the sample project steps for this chapter and use it as a model in carrying out the steps for your team project. Use the normalized set of relations developed in Chapter 6 as the global schema. For the team project, assume that there are at least four locations or branches for the enterprise and that the processing is to be distributed to these locations. Identify the applications that will be performed at each of the locations and then follow the steps below to plan the distribution of your database.

**Step 10.1 – Write out the normalized set of relations developed in Chapter 6 as the global schema.**

**Step 10.2 - Write out a set of end user locations and the applications performed at each. Provide a reason to justify why you chose this data distribution plan.**

**Step 10.3 - For each application, determine and write out the required tables.**

**Step 10.4 - Using the normalized relations, perform selection and projection operations, to create the set of vertical, horizontal and mixed data fragments needed for each application.**

**Step 10.5 - Map the fragments to the applications and locations.**

For each fragment that is required at more than one application location, decide whether the fragment can be replicated, by considering frequency of use and of update.

**Step 10.6 – Create a table (within Microsoft Word) showing a geographical network, listing the locations and applications. Write out the data fragments for each location.**

**Step 10.7 – Create a table (within Microsoft Word) showing a geographical network, listing the locations and applications. Determine and write out whether access will be local, remote, or compound.**

Make up a table showing each location and the applications requiring local access, remote access, and compound access.

**Step l0.8 - For each of the non-local accesses, identify the application and the location of the data. Provide a reason to justify your choice of non-local storage.**

Estimate the number of accesses required per day using estimates such as low, medium, or high. Provide a reason to justify your choice of non-local storage.

**Step 10.9 - Create a table (within Microsoft Word) showing a final geographical network, listing any adjustments made by your analysis of applications and traffic.**

If there are no changes, relist the geographical network table from Step 10.7.