Many of your projects have NO serious algorithmic complexity or difficulty, such as to find a linear algorithm to do something that normally requires an exponential algorithm or to make its arithmetic portable across all platforms.

For most, the entire project is about organizing sets of straightforward information about people, events, life, and social interaction.

As a result, D1, D2, and D3 are more about people, events, life, and social interaction than about computing. The same will be true of D4 and D5. The same is true of many of your SE490 and other capstone activities.

Perhaps this comes as a surprise to you, in SE or CS, which nominally deal mostly with technical issues.

Now you will start to write the specification that will become D5. Even if you don't think you've solved all the problems you need to solve before implementation, pick some coherent functionally complete scope, a minimal viable product, and go with it. Don't worry if you know that there will be many changes before you get around to implement things. You will, nevertheless, learn things that will change your project in ways that you did not predict. Reminder: If

1. you are a group of one,

or

2. a normal specification, a UM or SRS, is NOT right for your project

please get in touch with your TA and dberry@uwaterloo.ca about

1. scoping the specification to something the right size for one person,

or

2. finding the right notation for your project's D4 and D5.