[Introduction]

Hello, this is Cassie. In this video, we will talk about the strategies to form project groups.

Many OMSCS classes have group projects that will account for a large portion of your grade, so it is extremely important to find the right group members.

[Where do we start?]

So how will your project group be formed? In a few classes, your group might be chosen for you based on how you answer a questionnaire given by instructors. This is how it works in CS 6300, Software Development Process. In most other classes, you'll have the opportunity to choose your own teammates.

So let's discuss the process for creating your own project group.

Here are the likely steps to occur in your course:

First, the instructors will create a dedicated group formation thread on Piazza;

On this Piazza thread, students will introduce themselves and also mention their skill sets, where they live, and their availability to meet.

After that, other students can respond with interest to form a group;

Finally, once a group has been formed, one of the group members will declare the group to the instructors, either on Piazza or on a shared Google Sheet.

Now, the process may be simple, but the question remains: what do we look for in a group member?

[The ideal group member]

First, look for people who have **skills** that can complement your own. For example, if you are a database administrator, you'll want to look for frontend developers to work on the user interface, or maybe someone who has experience in project management. This way, you can divide the tasks between group members.

Then, consider the location of the potential group member. Having group members in the same **timezone** makes it much easier to coordinate meetings. Moreover, if you live in the same city, you can even meet in-person to work on the project or to study.

Finally, there is a high chance that you will run into **former teammates** in a class. If you have previously enjoyed working with any of these people, maybe you can ask them to work together again.

[Kickoff Meeting]

Once a group is formed, schedule a kickoff meeting over a web conferencing tool like Google Hangout to meet each other. Ask each group member to prepare beforehand to briefly introduce themselves and their skills, which role they want to take on, and present ideas and tools to be used.

In your kickoff meeting, you'll want to **introduce** yourself to the other members of your group and discuss your areas of expertise. Usually each group member will carry different career experiences and this diversity is always helpful to the group experience.

It is a good idea to have one member of the group take the role of project manager or group leader. In some groups it can happen naturally, as one team member might be very proactive in all matters. In other groups, you can take a vote on who will perform the duties of project manager.

One of the first things you should do as a group is create a timeline of project milestones (which may include deliverables), divide those milestones into smaller tasks, and then closely monitor your timeline throughout the semester and make sure all requirements are met.

[Tools of communication]
Google Hangout is the most common means of communication among project group members. It is a video conferencing service that is friendly across all devices. We recommend you check it out and download any necessary plugins prior to your first group meeting.

Other options for virtual meetings are WebEx and GoToMeeting. Use whichever one your group members prefer.

Google Docs -- Documentation is of the utmost importance when doing group work. A centralized repository like Google Drive is key so that all group members have access to all of your important files.

Calendar for events -- You'll want to maintain a project calendar that is accessible to all group members, and shows all of your milestones and deliverables.

Slack
You might want to consider creating a slack channel for your group discussions. Long email chains can get disorganized, so this is where Slack comes in. Keep in mind that the free version Slack has a limit on how many past messages are kept in history.

[Frequency of meetings]
You'll probably meet with your group once or twice a week, either virtually if you're not in the same geographic area, or in-person if you do live near each other.

[Group size]

The number of people your group will have is an important factor to consider. If the group is large, it can become difficult to coordinate meetings, and communication can be a challenge. However, having more members does spread the work out. On the other hand, if the group is small, each group member may have a larger workload, but it is easier to schedule meetings and manage communication. The typical OMSCS group size is about four members.

(In the video here, create a table on a Powerpoint slide to illustrate)

[Optimize and distribute tasks evenly]

Once your group is formed it's important to divide up the required tasks. You'll want to do this based on each group member's personal expertise, and the type of task that needs to be accomplished. You might start this process by developing an initial list of roles required to complete the project and posting it on a collaborative tool such as Google Drive, so that each team member can review it and voluntarily choose tasks they wish to work on. This allows team members to choose tasks they are more comfortable with, or tasks that may fit well with their expertise and skills set.

When each team member has decided what his or her contributions will be, the remaining tasks can divided up evenly amongst the group.

Following this process will optimize the skill set each team member brings to the project and ensure the workload is distributed evenly and fairly. And, it sets up group dynamics for the most successful outcome.

[Project deadline]

Project deadlines are a given in every course and should be recorded on every project plan. In addition to the final due date, the team should agree on several intermediate milestone dates where smaller project goals are identified for completion. These will represent a methodical and progressive plan to project completion.

Developing an incremental approach for project completion will help to avoid overwhelming workloads and expectations on the team. Each team member should review the plan of work and acknowledge their agreement with the intermediate goals for project completion to avoid confusion and ensure the project has the best chance to stay on track.

[Conclusion]

This concludes our discussion on OMSCS project groups. Remember, make sure you do your fair share, because you'll probably be asked to rate your group members, and your grade may depend on this.