Problem
ADT (Asian Dance Team) and DT (Dance Troupe) are two of the biggest student groups at MIT. Each semester, hundreds of students audition for these groups, and exec members spend hours manually placing people into different dances. Furthermore, during the semester, each choreographer communicates with their dances differently, some using FB groups, others using email chains. Especially for dancers who are in multiple dances, this can get confusing and important announcements may get lost. Our proposed project attempts to solve both these issues, by providing a platform that will have a more efficient, automated rostering system as well as an announcement portal for more consistent communication between members.

How the app will work
The key concepts of the apps are students, student groups, and teams. For ADT, the student group would be ADT, the "students" would be the dancers, and the "teams" would be the dances and each dances' choreographers.

In the sign up phase, each student group will be allowing students and teams to sign up. There could be constraints on this such as any student with a certain email can sign up or only certain people can create teams. After the sign up phase, the user can request the system to automatically roster, which means using stable matching to assign people to teams. An admin of the student group can also choose to bypass this matching and allowing members to be assigned to teams either manually or by some preset method.

After the sign up phase, dancers will be able to view announcements from the student groups and teams they are a part of. The announcements will by default be displayed in time order (most recent to least recent) and users can choose to filter by team or by type (if the announcement contains a video, etc). When an announcement is updated, the team leader can choose whether or not to bump it back up on user feeds.

People can have multiple roles, meaning that they can be a choreographer of a dance as well as be a dancer of another dance. An admin of the student group can also be in a dance.

Why the problem is not trivial
The problem includes a lot of non trivial components. On the rostering end, the app will seek to use stable matching in addition to user set constraints in order to match students to teams. On the announcements end, we want to make it possible to include different kinds of announcements and make display relevant announcements to users intelligently and allow users to filter announcements.