This solution to the problem 2: CONFERENCE TRACK MANAGEMENT was built with VisualStudio 2022, which can be build through the ConferenceManagement.sln file.

First the talks are constructed into a vector from an input txt file that has one talk per line. These talks are then sorted in descending order of duration. Through the sum of all talk durations the number of needed tracks is calculated, which always have a morning and an afternoon session. The morning session has a limit of 180 minutes for talks while the afternoon session has 240 minutes. Each talk from longest to shortest is appended to the session, which has the most free minutes left. This sorting results in an even distribution of talks of the same length, so that not one session gets filled first with all 60 minutes talks. It is also helpful to create synchronized points between different tracks throughout the sessions in which participants can switch between tracks if certain talks are more interesting for them. Another benefit is that long talks are at the beginning of sessions, at which all participants still have a lot of concentration for these talks.

Lastly the latest ending of all afternoon sessions of all tracks is taken as the starting point for the networking event.