## Part I
# Functional requirements

1. Ability to put in information such as: force value, beam width, lower cover, top cover, hole diameter, pad thickness, number of holes.
2. Make calculations based on the selected type of the compression pad according to manufacturer's specification.
3. Make several extra calculations for reference for the user to check and do not stop at the first one which meets requirements.
4. Prepare checking and validation mechanism to see if all requirements are met.
5. Present final dimensions of the compression pad and check if such pads are available to order from the specific manufacturer based on the information available in the provided product specification.
6. Ability to easily request an update of the pad specification if the manufacturer made any changes in the product. Also an ability to quickly and efortlessly update application's database.
7. An ability to calculate and check if the rotation of the beam meets requirements.
8. An ability to save current calculations to the file to quickly load it up.
9. An ability to export current calculations as the report file in DOC or PDF format.

## Part II
# Non-functional requirements

1. Application should be relatively lightweight.
2. Preferably as stable as it can be without crashes and freezes.
3. The current calculations should be saved as temporary data in case of unexpected program termination with the ability to immediately load it up on application startup.
4. The UI should be as friendly as it can be.