Project type **Vehicle Ventilation**

Project assignment number 1

Part1

should include an executive summary with the following sections:

* The title page should include the title/name of the project, the group number, a list of team members' names and email addresses, and a photo/drawing of the initial design or idea of the product.
* Executive Summary should include:
  + Description of the product (the idea that you selected)
  + Description of the key innovation and its advantages over existing/competitive approaches. If new, explain the need that leads to the creation of the product. (what are you going to do differently to make it unique or make stand out)

**Part 2**

* + Design feasibility study to ensure that the product can be executed within two semesters and can compete with other products in the
  + market. (the material that you will use, the method of building the product, and so on). Remember that you will be creating a functioning prototype.
  + Initial drawings/photos of the suggested idea or product
  + Comparison of your product with other similar products in the market (preferred using a product matrix supported by photos)
  + Check similar existing patents at [Google Patents](https://patents.google.com/%C2%A0) or [US Government Patents](https://www.uspto.gov/patent), which will assist you in identifying how other products work
  + Overview and size of addressable commercial markets (market share reports of the existing and similar market, for example, if your product is a car accessory, you need to find the market size of car accessories and define a percentage for your product)
  + List the milestones needed to complete designing, developing, and testing the product, with the assumption that the project duration will be over the project of two semesters starting September of this year and ending May of next year. (this will be a tentative schedule that can be adjusted during the progress of the project. Examples of milestones that should be completed next semester are product testing, design adjustment, final identification of components (BOM), suppliers selection, mass production cost estimation, state and federal rules and regulations, product documentation, and closing of the project).