**These are the requirements for your Assignment**

Assignment questions and objectives will be **1) assigned by the responsible course instructor (professor or lecturer)**, who will also provide the necessary framework for the task. Projects can be designed and realised in the different fields of print media (newspapers, magazines, books), classic electronic media (television, radio, music, film), as well as new electronic media (Internet, multimedia, games, etc.). The primary goal of the module “Statistics and Business Mathematics” is to **2) enhance students’ IT and numerical skills and teach them the ability to perform data science with SPSS**. After this class, students are capable of analyzing data with SPSS and test different hypotheses. **3) Students will be given a data set** and are supposed to execute suitable statistical tests on the given data to answer a given research question. Finally, students will **4) write a research report (project paper) about their findings**. **5) Reporting of results as well as tables and figures have to follow the APA 7-Styleguide**.

It is compulsory that projects are carried out individually Formal execution: Research paper has to be 10-12 pages. APA Guidelines shall apply for reporting of results. Use Guidelines for Research and Project Papers for general formatting. Use APA 7 for citation and reporting.

Your paper should have the following structure:

1. Relevance (1 Page)  
2. Research Question and Hypotheses (four hypotheses) (1 Page)  
3. Explanation and Justification of Selected Statistical Tests (3 Pages)  
4. Results including APA-Tables and APA-Figures (3-5 Pages)  
5. Conclusion (2 Pages)

**Requirements for your project paper (specification):**

**1.     Descriptive Analyses:**

* Create two different (and sensible) types of data visualizations for your results. You may choose from these types of visualizations: bar chart, pie chart, pareto diagram, scatter plot -> use Excel to create your data visualizations
* Create one table in APA format to present your results (e.g. frequency distribution table, comparison of means)

**2.     Hypotheses Testing:**

* Test two dependent hypotheses (there is a connection between two or more variables, e.g. *„There is a correlation between „openess as a personality trait“ and „interest in technology“)* and two differential hypotheses (two or more sample groups are different from each other by one or more variables, e.g. *„Generation Z differs from Generation Y in respect to their use of media platforms“*)
* Use at least one multivariate method for statistical data analysis
* Create one table in APA format to present your results (e.g. frequency distribution table, comparison of means)

**3.     General requirements:**

* Usually, hypotheses are derived from theories (journal papers, books). In this class, we focus on hypotheses testing (data analysis) and do not necessarily read any scientific literature. Thus, you are allowed to create sensible hypotheses from your personal experience or from the experience of others (e.g. as reported in media, please use sources). You can also draw on findings in scientific literature, but this is not a must.
* Follow the rules of APA 6 in terms of reporting of statistical results in your text as well as creation of tables and figures (data visualization)