

Assignment 3 - Design of Experiments

[New Attempt](#)
[Alternative formats](#)

- Due Feb 19, 2023 by 11:59pm
- Points 80
- Submitting a file upload
- File Types pdf

Instructions

Your team has created a new mobile application, and you are tasked with using Design of Experiments to create pairwise combination test cases based upon the following requirements. Research and identify a tool that supports DOE and utilize the tool to develop test cases for the given specifications. Mobile Application Testing Specifications:

Type of Phone Parallel Tasks Running Connectivity Memory Battery Level

iPhone X	Yes	Wireless	1 GB	< 20%
iPhone 8	No	3G	2 GB	20 -39%
Samsung S9		4G	4 GB	40 - 59%
Huawei Mate		Edge	6 GB	60 - 79%
Google Pixel 3				80 - 100%

Submission Instructions

Please prepare a report including the following:

- a description of the DOE tool selected explaining the scope, purpose and example of its usage with a use case
- the number of test cases created by DOE tool
- Screen shot of the test cases created by the DOE tool (high resolution images to be used)
- Assessment of the DOE tool in your own words in terms of
 - usability
 - coverage
 - tool features

How to submit:

- 1- Upload your documents in pdf format
- 2- Screenshots of the tool should be inserted into the document. Use high resolution images which can printed if needed.
- 3- **No zip file submission is permitted.**
- 4- There is no limit on the number of pages

This report is meet the academic paper standards. You are expected to write an academic paper which discuss and elaborates on material in question. You are expected to provide an in-depth analysis, evaluation, or interpretation of a single topic, based on empirical evidence. Evidences are provided by making reference to another research result done and published by someone or by referring to a study you conducted yourself. Proofread your document for grammar, formatting errors.

If you are not sure what constitute a graduate level academic paper, pls refer to a guide [as such](#).

(<https://libguides.usc.edu/writingguide/academicwriting#:~:text=Characteristics%20of%20academic%20writing%20include,investigation%2C%20and%20prec>) or work with [ASU's academic writing center](#) (<https://tutoring.asu.edu/graduate-writing-tutoring>).

DOE Rubric

Criteria	Ratings				Pts
Description of DOE tool Explain its scope, purpose, and example of its usage with a use case.	25 pts Full Marks	15 pts Half Marks	0 pts Alternative formats		25 pts
Number of test cases generated	10 pts Identified all test cases	5 pts Not identified the number of test cases	0 pts Identified some of the test cases		10 pts
Demonstration of the test cases created by the DOE tool	10 pts Screen shot is provided	5 pts Half Marks	0 pts Missing screen shot		10 pts
Assessment of the tool Explain its usability, coverage, features and try to include examples.	30 pts Assessment of the tool is provided	15 pts Half Marks	0 pts No assessment of the tool		30 pts
References Cite references used in the report and include a references list.	2.5 pts Full Marks	0 pts No Marks			2.5 pts
General Proofreading with no grammar or formatting errors.	2.5 pts Full Marks	0 pts No Marks			2.5 pts
Total Points: 80					