

## Assignment 1: Meaning of Requirements (20% of the total grade)

### Requirements Engineering (Summer 2021)

#### IMPORTANT DATES

Thursday (7/15/2021), in class  
Monday (7/19/2021), 9:00am

Assignment 1 release  
Assignment 1 report due

#### DESCRIPTION

This is an **individual** assignment. You are asked to identify at least **three tuples** of  $\langle R, E, S \rangle$  involving WebEx in the context of remote learning, and at least **three tuples** involving GitHub in the context of remote learning, such that “E, S entail R” for each tuple. Your “R”, “E”, and “S” shall be expressed in English, and if desired, you can supplement your English descriptions with figures, definitions, or other means. **Optionally**, you can provide the rationale to elaborate your  $\langle R, E, S \rangle$  tuple(s), and provide reasoning why “E, S entail R” holds for certain tuple(s).

Keep in mind that “R” represents “stakeholders’ needs and desires”, which are *typically* about private phenomena in the environment and are optative. “E” represents “environment assertion(s)”, referring to the given (indicative) properties and the private phenomena of the environment. Finally, “S” is the specification, which is optative and should refer to the machine (i.e., WebEx or GitHub).

For this assignment, try to express “R” *without* referring to the machine, rather, pay attention to the specific stakeholder roles and their needs and desires. For “E”, stay relevant and state important assumptions, which if not made explicit, may violate “E, S entail R”. For “S”, try to include the machine in your answers.

#### SUBMISSION

You shall write your Assignment 1 report by including at least the following items:

- Title page that includes author, email, and date.
- Your  $\langle R, E, S \rangle$  tuples (at least three tuples) for WebEx, e.g.,
  - WebEx  $\langle R, E, S \rangle$  tuple #1:
    - R: “(English description of R)”.
    - E: “(English description of E)”.
    - S: “(English description of S)”.
    - Rationale (optional item)
    - Reasoning (optional item)
  - WebEx  $\langle R, E, S \rangle$  tuple #2:
    - ...
- Your  $\langle R, E, S \rangle$  tuples (at least three tuples) for GitHub.
- Lessons learned (optional item)

## NOTES

- For either machine (WebEx or GitHub), the  $\langle R, E, S \rangle$  tuples shall be as distinct as possible. A useful hint is to diversify “R”.
- Your Assignment 1 report shall be in PDF format.
- Please email your Assignment 1 report to [nan.niu@uc.edu](mailto:nan.niu@uc.edu) before 9am, Monday (July 19, 2021).
- The late penalty is 20% earned grade off for each day being late (up to two days). If you have difficulty in meeting the submission deadline (9am, Monday, 7/19/2021), then please contact the instructor ([nan.niu@uc.edu](mailto:nan.niu@uc.edu)).