

UPCC

Program Design Language

Submitted to:

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Revision Control

History Revision:

<i>Revision Date</i>	<i>Person Responsible</i>	<i>Version Number</i>	<i>Modification</i>
11/26/17	James Abaja	1.0	Initial Document.
11/29/17	Ciana Lim	2.0	Edited the logic for the method.
12/1/17	Ciana Lim	3.0	Added logic for the method.

Control Class: InputPassedSubjectsController

Program Specification (Method): markSubject

Input:

Subject - the Subject that the Student marked as taken and passed, or the Subject that the Student will unmark.

Output:

passedSubjects - List of subjects that the Student has already passed.

Program Logic:

```
IF subject.marked NOT IN passedSubjects THEN
    ADD subject TO passedSubjects
    ADD subject.units TO totalUnits
ELSE IF subject.marked IN passedSubjects THEN
    REMOVE subject FROM passedSubjects
    SUBTRACT subject.units FROM totalUnits
DO
    IF otherSubject.prerequisite = subject THEN
        REMOVE otherSubject FROM passedSubjects
        SUBTRACT subject.units FROM totalUnits
    ELSE IF otherSubject.isJS AND (totalUnits OR
        (passedSubjects List AND totalUnits)) does not satisfy
        isJS THEN
        REMOVE otherSubject FROM passedSubjects
        SUBTRACT subject.units FROM totalUnits
    ELSE IF otherSubject.isSS AND (totalUnits OR
        (passedSubjects List AND totalUnits)) does not satisfy
        isSS THEN
        REMOVE otherSubject FROM passedSubjects
        SUBTRACT subject.units FROM totalUnits
    ENDIF
UNTIL End-of-List of passedSubjects LIST
ENDIF
```