## **September 25 PLT Group Meeting**

## **Language Updates**

- No longer need Score type: Pass [Measure] to genScore
- Add Beat type
  - Represents a length of musical time. It has a Time tag and integer type. Must have the string "Time" followed by an integer that is a power of 2 and < 32 in declaration</li>

whole note: Time 1half note: Time 2

• quarter note: Time 4

• eighth note: Time 8

• sixteenth note: Time 16

thirty-second note: Time 32

- Uses + operator to combine Time but only adds two operands that contain the same integer; recursively checks for Time operands that contain the same integers until only unequal Time integers are left
  - Time 4 + Time 16 + Time 16 + Time 16
  - Time 4 + Time 8 + Time 16 + Time 16
  - Time 4 + Time 8 + Time 8
  - Time 4 + Time 4 = Time 2 (quarter note + quarter note = half note)
- Add library function fillMeasure: Given a list of chords, return a boolean whether the beats of each chord in the list add up to a measure.
  - Time 1 + Time 32 evaluates to False (cannot have more than a whole note in a measure)
  - Time 4 + Time 16 evaluates to False (quarter note and sixteenth note do not contain enough beats for a measure)
  - Time 4 + Time 4 + Time 4 + Time 4 evaluates to True (4 quarter notes in one measure)

## Language Reference Manual: Due October 28

| Week        | Goal |   |
|-------------|------|---|
| 1           | •    | Skim C LRM  |
| Starts 9/25 |      | <ul> <li>Note which aspects are in SMURF</li> </ul>                   |
|             |      | <ul> <li>Note which aspects need to be modified for SMURF</li> </ul>  |
|             |      | <ul> <li>List parts of SMURF that don't have relation to C</li> </ul> |
|             | •    | Research how to compile (syntax/grammar) func. languages              |
| 2           | •    | Assign different sections to each team member to write                |
| Starts 10/2 |      | (done by Monday 10/7)   |
|             | •    | Assign different sections to each team member to proofread            |
|             |      | (done between 10/7 and before 10/9 meeting)                           |
| 3           | •    | Write grammar at this meeting   |
| Starts 10/9 | •    | Start coding and testing  |

## **Potential Workflow**

- Each person will fulfill (only) one of the following roles for a given section of SMURF, roles will rotate among each section
  - o Writer
  - o Proof-reader
  - o Coder
  - o Tester