

Philip Pesic

Week 5

February 19 2023

Week 5 Lecture Notes

Alternative sequences

Sequences are procedural sets of steps or actions. Alternative sequences are sequences which contain multiple branches, represented in code by if statements.

Ex:

If it is raining -> wear a jacket

|

if not -> don't

Criteria

Criteria, also called condition, is the basis/standard on which something is judged. Criteria determine the motivation for an action, and what is necessary to execute it.

Ex: criteria is in (), action is in {}

(If it is raining) -> {wear a jacket}

|

(if not) -> {don't}

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If/else

In code, alternative sequences are in the form of if/else statements. If/else statements can also be written as just if statements if there is no default case. These are referred to as double and single selection respectively.

Ex:

```
If (x==1) {
```

```
//Executed if x is 1
```

```
}
```

```
Else {
```

```
//Executes otherwise
```

```
}
```

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Cascading and nested if/else

Cascading ifs and nested ifs are ways to write if statements inside of other ifs. Cascading ifs are structured in a way such that only the first true case is executed, while in nested ifs, every case must be true.

Ex:

//Cascading

If (x ==1) {

}

Else if (x==2) {

}

Else {}

//Nested

If (x!=1) {

If (x!=2) {

}}