

Bonus Assignment - Tennis Game Kata

PV260 Software Quality

May 4, 2015

Tennis Game - Scoring

- ▶ Each player starts with 0 points
- ▶ The scoring then goes like this $0 \rightarrow 15 \rightarrow 30 \rightarrow 40$
- ▶ If A has 40 and scores, and B doesn't have 40, A wins
- ▶ If both have 40 and A scores, A has Advantage
- ▶ If A has Advantage and scores, they win
- ▶ If A has Advantage, B has 40 and scores, both are at 40 again
- ▶ Scores are written in the format 'A - B', e.g. '30 - 15'
- ▶ When A has Advantage, the score is written as 'A - 40'
- ▶ If scores are equal, e.g. both have 30, it is called '30 all'
- ▶ If both players have 40 points, it is called 'deuce'

Tennis Game - Controls Specification

- ▶ The game is controlled from console
- ▶ User enters text commands, for each command there must be some response
 - ▶ description of new state
 - ▶ unknown command notification
 - ▶ list of available commands
 - ▶ ...
- ▶ Commands are NOT case sensitive
- ▶ The state descriptions can be wrapped in arbitrary text to decorate the output.
 - ▶ E.g. if the score is 15 30 the output can be 'Current score is 15 - 30.' or 'The score is 15 - 30 now' etc.

Tennis Game - Controls Specification

- ▶ Following commands exist:

- 'Exit' : Quits the program
- 'New Game' : Can be called at any time, scoring is reset to 0
- 'Player X Scored' : Where 'X' is either A or B, increments score of player X
- 'Show Score' : Displays text containing the score which is in the format specified above. If there is a winner already, output is same as that of 'Show Winner'
- 'Show Winner' : Displays name of the winner ('A' or 'B') or text containing 'no one' if there is no winner yet