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| CommandLineController | |
| Allow user to input choices | Game |
| Creates and maintains Game objects | DatabaseQuery |
| Creates and utilises DatabaseQuery object |  |
| Returns text output as Strings |  |
| Logs game info if requested |  |

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| Game | |
| Create and maintain ModelPlayers. | ModelDeck |
| Choose who plays first. | ModelPlayer |
| Decide who’s turn it is per round. | ModelCard |
| Decide which player has won each round. | ModelCommunalPile |
| Choose stat to be compared, from player or AI. |  |
| Take cards from opponent and give to winner of round. |  |
| Query players and compare stats for current cards to determine a winning player. |  |
| Keeps track of active players. |  |
| Keeps track of how many rounds each player has won for database. |  |

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| ModelAIPlayer | |
| Select the highest attribute from current hand | ModelCard |

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| DatabaseQuery | |
| Add new game table to database | Game |
| Query database to provide stats from previous games |  |
| Return stats as String |  |

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| ModelCard | |
| Represents a Top Trumps card with given text and attributes |  |
| Returns attributes and descriptions as integers and Strings |  |

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| ModelPlayer | |
| Add and remove cards from hand | ModelCard |
| Returns card info as String |  |

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| ModelCommunalPile | |
| Stores the communal card pile while game is in play | ModelCard |
| Returns or passes on pile to round winner until no cards left | ModelPlayer |

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| ModelDeck | |
| Maintains list of cards split between communal pile + main deck | ModelCard |
| Deal cards between players | ModelCommunalPile |
| Shuffle cards in deck | ModelPlayer |
| Add cards to deck |  |
| Get card from shuffled deck |  |
| Return deck info as String |  |

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| ModelDeckBuilder | |
| Reads card info from a given text file. | ModelDeck |
| Populates a ModelDeck object with ModelCards | ModelCard |

A picture containing text, map

Description automatically generated