# AJETH

**4stones**

# Software Design Document

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| **Class name: AI** | |
| **Brief description:** Acts as a computer object with methods to execute moves. | |
| int difficulty | **Attribute Description** |
| This is a declaration of an integer to be used through the class as a means of determining which move method to use. |
| **Program Description Language** |
| public int difficulty |
| int makeMove(); | **Method Description** |
| A method to execute one of the various move methods based on the difficulty selected. |
| **Program Description Language** |
| int AI::makeMove(){  switch(\_difficulty){  case 1: //Easy AI  minAlgorithm();  break;  case 2: //Medium AI  return randomMove();  break;  case 3: //Hard AI  maxAlgorithm();  break;  }  } |
| int randomMove(); | **Method Description** |
| A method that generates a number then checks if that position on the board is available, if available place piece at that location. If not available, generate new number and try again. |
| **Program Description Language** |
| int randomMove(){  int random\_integer = random number  while (spot isn’t available){  random\_integer = new random number  }  board->placePiece(random\_integer, -1);  return random\_integer;  } |