**COMP 3981: Project Description (Part #1)**

# Problem Formulation and Graphical User Interface (GUI) Implementation

## State Representation:

Black Marbles at 8

White Marbles at

## Initial State: (For visuals, please see end of document)

|  |  |  |
| --- | --- | --- |
|  | Black Marbles [location, marbles lost] | White Marbles [location, marbles lost] |
| **Standard Formation** |  |  |
| **Belgian Daisy Formation** |  |  |
| **German Daisy Formation** |  |  |

## Goal Test:

Black Marbles:

or

White Marbles:

## Actions (For visuals please see end of document

|  |  |  |  |
| --- | --- | --- | --- |
| #Marbles | Alignment of marbles | Actions (Given current state ) | Resulting State |
| 1 | N/A |  |  |
| 1 | N/A |  |  |
| 1 | N/A |  |  |
| 1 | N/A |  |  |
| 1 | N/A |  |  |
| 1 | N/A |  |  |
| 2 | Horizontal |  |  |
| 2 | Vertical |  |  |
| 2 | Horizontal |  |  |
| 2 | Vertical |  |  |
| 2 | Horizontal |  |  |
| 2 | Vertical |  |  |
| 2 | Horizontal |  |  |
| 2 | Vertical |  |  |
| 2 | Horizontal |  |  |
| 2 | Vertical |  |  |
| 2 | Horizontal |  |  |
| 2 | Horizontal |  |  |
| 3 | Horizontal |  |  |
| 3 | Vertical |  |  |
| 3 | Horizontal |  |  |
| 3 | Vertical |  |  |
| 3 | Horizontal |  |  |
| 3 | Vertical |  |  |
| 3 | Horizontal |  |  |
| 3 | Vertical |  |  |
| 3 | Horizontal |  |  |
| 3 | Vertical |  |  |
| 3 | Horizontal |  |  |
| 3 | Horizontal |  |  |

## Resources:

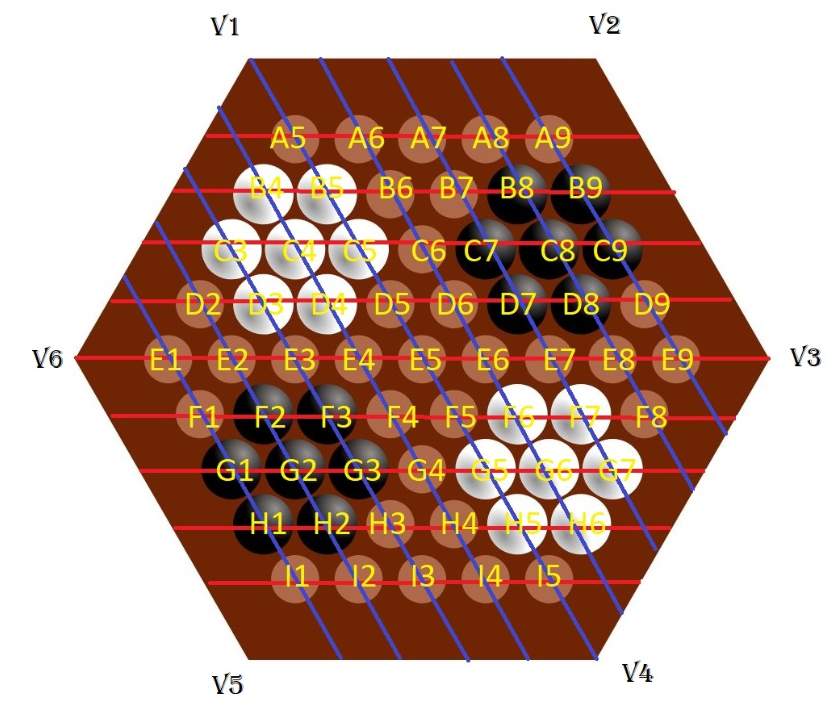


Figure - German Daisy layout with coordinates and vectors.

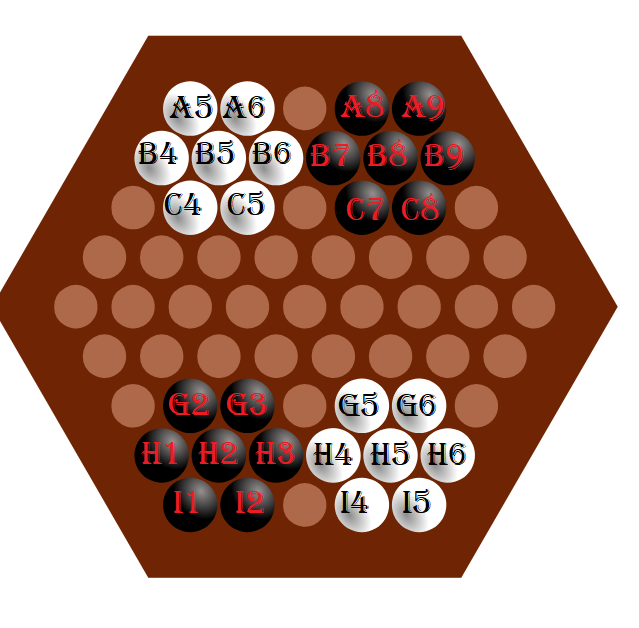


Figure - Belgian Daisy Layout with coordinates.

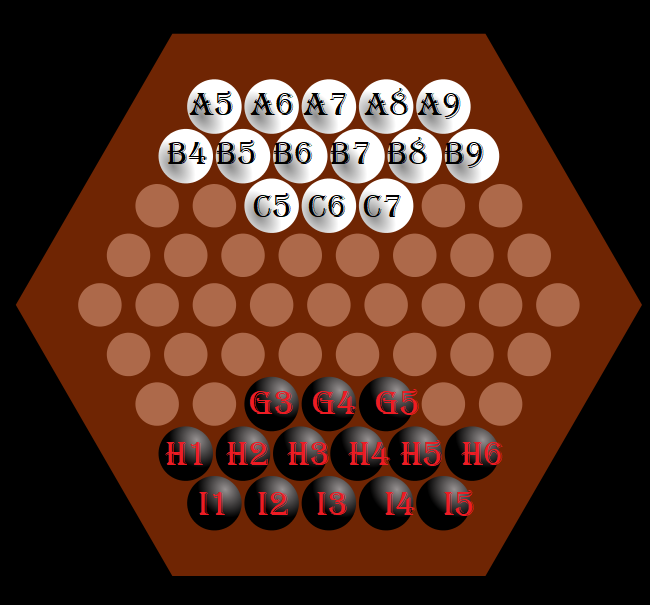


Figure - Standard Layout of the board with coordinates.