I want you to create a certain type of diagram when I ask for a decompostion fiagram. It should be a tree diagram and it should have rectangular nodes and undirected arcs. The arcs MUST be UNDIRECTED. The root node is the wider component / prolem and the child nodes are sub problems / sub components that their parent can be broken into. I may ask for child nodes to be further borken up. To make this diagram you must take my text prompt abut how the problems break down, build a heirarchy of sub problems / components from the root and then create the diagram. To create the diagram you should use code that I can load into <https://mermaid.live/>.

Here is an example of the diagram structure I want:

graph TD

A[Board State Component] --- B[Data Structure for Board Layout]

A[Board State Component] --- C[Turn Tracking]

A[Board State Component] --- D[Legal Move Generation]

A[Board State Component] --- E[Check Detection]

A[Board State Component] --- F[Game Over Determination]

A[Board State Component] --- G[Make Move: Create Child Board State]

Do you understand