2012H Group Proposal

1. Project Title: Twilight Struggle Lite

Project Code: H22
Group Information:

- a) Group members:
 - i. WANG, Ruida
 - ii. WANG, Ziyi
 - iii. Tan, Weile
- 4. Project background: This project is inspired by a board game called Twilight Struggle; this is a game that represent the strategic point of view fighting through the whole cold war. That focus on the majority fighting points of both sides of the fighting, and it is driven by events that happens in the game.
- 5. Project Description and expected end result of Project:
 - a) We will focus on the main part of the game, which is the influence of the two great power to other minority nations and the fighting between the super powers to prove that their ideology fits for the human civilization by influencing more nations to join their allay
 - b) There are serval ways to win the game, and during the game, to win the cold war is the aim for all your decisions:
 - i. Scour count of Europe part the superpower who attained the domination of the Europe will immediately win the game
 - ii. When a superpowers' victory point reaches 20, by the end of the round, it will win the game
 - iii. When in your turn, the DEFCON level drop to 1, the nation will automatically lose the game
 - iv. When the game comes to the end of the final round, the system will automatically count all the regions and update the victory points, the superpower that has more victory points will win the game
 - c) The basic system of the game will be the resource point system of two superpowers. It will be gained by the random event that shows up at the beginning of each turn. On the strategic scale, it represents the total resource the superpowers have, to push the trend to their side. There are following uses for resource points:
 - i. Add influence points on a nation
 - ii. Launch a coup to a nation
 - d) Then comes to the event system, on the beginning of each player's turn, a random event will show up with the description of the event. The event will be randomly generated by the system from the event base. There are totally following ways of events:
 - i. Give certain numbers of resource points to player (Normal case for the event)
 - ii. Score count a certain area
 - iii. Give certain victory points

- iv. Change DEFCON level of the game
- v. Free chance for coup in certain region
- e) DEFCON system: Represent the nuclear war tension during the cold war, the main changes will result from events and coup on certain regions. There will be following ways to change the DEFCON level:
 - i. Launch a coup in another superpower's domination region will increase one level while launch a coup in a region that domain the region will decrease the level by one
 - ii. Changed by the events
- f) Victory points system (VP): Represent the trend of a certain nation to win the cold war, it is a 1d line that begin from the centre (0 VP for both nations), when USSR gain one VP, move to USSR side for one box, same for USA part.
- g) Cold war period: will change automatically when a round ends, follows the rule for the period of cold war, when enter one period, new events will show up. Totally, one round will contains 7 turns for each players and USSR will always moves first
- h) Coup system: Detailed rule to be further determined
- i) Others: AI for single player: We will design an AI that can play under the one player basis, detailed algorithm to be determined!
- 6. OOP Technologies: Objects we will define and use for the project:
 - a) Event (one obj for one event)
 - b) Possible events (one LL)
 - c) Events for certain period (LL)
 - d) Country (one obj for a country)
 - e) Region (Array of pointers to country in a certain region)
 - f) DECFON (int)
 - g) VP (int)
 - h)
- 7. External library to be used: GUI library
- 8. Reference:
 - a) https://boardgamegeek.com/boardgame/12333/twilight-struggle
 - b) https://en.wikipedia.org/wiki/Twilight Struggle
 - c) https://www.gmtgames.com/living-rules/TS Rules Deluxe.pdf