# Mod Design Outline

A design document to be the blueprint from which the is to be built. As such, every single detail necessary to build the mod should be addressed. The larger the team and the longer the design and development cycle, the more critical is the need. The intent is to capture as much as possible of the design.

1. **HOI4 Authenticity Project**
   1. Project Cavern: set HOI4 into WW2 contingencies.

Insert small summary of the mod here.

1. **Mod Overview**
   1. Mod Key Concept
      1. Player’s incarnation

The player is not an all controlling *nation-gest* but is some sort of time traveler in 1936. The player is transported in the political elite of the nation of his choosing, he is a political actor inside a government. For gameplay concession, he is deemed to be an assistant/advisor to the ruler/ruling bureaucracy of the nation he chose. At the start of the game, similar to an RPG character, he chooses his background through a few decisions (First world war veteran, local bureaucrat etc..) which is going to affect his relation with the various stakeholders in the country afterwards.

* + 1. The economy: constrained budget management

The first thing the player is going to be tasked is navigating the various issues the country he chose is facing in 1936. Chiefly one of the key points he will have to deal with will be the issue of rearmament or national defense strategy. Breaking with the vanilla paradigm, there is a clear divide between the civilian and military world. The GDP of a nation is not in the hands of the player and he cannot increase overnight the industrial capabilities of his nation. The industrial capabilities are mostly determined by external factors outside the player’s control or can be influenced in his interests but never fully controlled (except maybe when you are Stalinist…). The national defense is managed through a budget, the armed forces budget. Other spending and decisions can be taken or influenced by the player, but the critical gameplay ones will be related to the armed forces budget. The budget is going to be limited and choices will have to be made.

* + 1. Stakeholders

The player is not the only one wanting to influence the nation he chose. Other stakeholders are trying to wrest control of the nation and will have different agendas, often different from those of the player and will try to obstruct him or assist him depending of his choices. These stakeholders vary from nation to nation, but can be individuals, companies or interest groups.

* + 1. The technology
    2. The politics
    3. The map

Every province a state

* 1. Genre  
     Realism, authenticity.
  2. Target Audience  
     NEEEEEEERDS
  3. Look and Feel – What is the basic look and feel of the game? What is the visual style?  
     The look and feel should be of reading a period newspaper or old black and white movie about WW2. Black and white visual style with a military like interface.

1. Gameplay and Mechanics
   1. Gameplay
      1. Game Progression

The player is first tasked with managing the government of a country in 1936 in times of peace, navigate through the events that historically led to WW2 and when the war happens to wage it.

* + 1. Challenge Structure

Manage to influence the conflicting interests of the various stakeholders making up the country the player controls in order to win the war thanks the player hindsight knowledge of history.

* + 1. Objectives – What are the objectives of the game?

Win a second world war.

* + 1. Play Flow – How does the game flow for the game player

The player has to manage situations through the decision menus, the focus tree choices and various prompting events for most of the pre-war period. When the war arises, he has to manage the armed forces as well as national issues arising during wars and prompted by the same various stakeholders of the country he is “controlling”.

* 1. Mechanics
     1. GDP

The GDP of a nation is based on the various buildings present in the various states. Those buildings are divided into several categories: agriculture, primary extraction industries, industries (with subcategories), services and infrastructure. The GDP of a nation is the product of those buildings and the intrinsic value each of those building create. Industries create more GDP than agriculture of course and thus more industrialized nation have an edge over smaller ones.

* + 1. Budget.  
       A yearly budget for the armed forces is at the player’s disposition. The budget is a function of the base economic situation of the nation and the proportion of expenditures devoted to the armed forces. Both of these can vary as an effect of various events or decisions in the game. The base budget also increases due to general yearly GDP growth. In general, the armed forces budget should rise due to world tension, decisions or diplomatic situations.  
       The yearly budget is divided into monthly payments. Running out of funds is not a good idea as it will upset the finance ministry and lower political power and armed forces morale. You can run a surplus and save money for future expenses, but too great of a surplus will entice the finance ministry to use them for other purposes.
    2. Debt  
       You can go over the budget, but will incur debt and your superior will be displeased and will remove you from office if the debt is too great.
    3. Civilian Budget

Civilian budget is the non-armed forces of the government’s budget. It should represent the bulk of the government’s spending. It requires a lot of effort to change its

* + 1. Military-Industrial Investments  
       One of the various ways to spend the Budget for the armed forces is through Military-Industrial Investments.
    2. Research.  
       The player defines a portion of the budget up to a maximum of 10% as spent on research. There are a number of different research areas, from battleship projectiles to submarine technology and a lot in between. In the research menu, you can shift priorities between different research areas. Note that these priorities are relative, so setting all research areas to high will not increase research, it will just men that all are equally prioritized.   
       Spending on research will lead to research advances, which will have varying effects depending on the area.  
       You cannot specify a technology before it is invented and ask your staff to research it. This is a more realistic model where you ask your staff to focus on a certain area but you cannot be sure what they will come up with.

For the AFV research system, in a specialized menu, the player requests specific features (such as weight, turret design, gun caliber design, armor, amount of radio and machine guns etcc). The assigned research team is then going to get to work to build a prototype. The speed of research and quality of product is dependent of the amount of money thrown at it. Once the first prototype is finished, a new technology is then researched and the tank is then ready according to the specs (through the variant interface) albeit with low reliability at first. After enough built models and practical experience in field testing at large can reliability be increased.

* + 1. Armed Forces

Planning bonus is gone, replaced by decisions related to planning offensives (eg: Fall Blau)  
Due to the inherent game mechanics and the state of the AI battle planner, there is no realistic option of delegation of control of the military from the hands of the players. Any option to reduce planning bonus as the game developers introduced when directly controlling a unit is deemed obtrusive.

* + 1. Land Combat
       1. Combat width
       2. Soft Attack
       3. Generals
       4. Combat Tactics

In military operations terms, combat can be divided into several phases. A preparation phase that can be replicated with difficulty in the game except for the planning phase and assembly area phase that can be handled through the *planning bonus* and *decisions* system.

The actual conduct of the combat starts with the initial combat assault phase that can result in a breakthrough phase.

The third phase of combat, the Exploitation (Follow-on (support) phase; Pursuit phase; Objective security phase; Position consolidation phase; Defensive phase; Reorganization phase) cannot be really replicated either.

The overhaul will focus on the actual conduct of the combat. The combat tactics are replaced by simplified attack/defense tactics that are ranked by their quality of execution depending on the traits of the general and divided into several phases of combat (initial attack, breakthrough and exploitation).

The initial assault effectiveness by the attacker will be dependent of his doctrine, level and planning.

* + - 1. Doctrine
    1. Intelligence
    2. Screen Flow -- A graphical description of how each screen is related to every other and a description of the purpose of each screen.
  1. Game Options – What are the options and how do they affect game play and mechanics?
  2. Replaying
  3. Easter Eggs

1. Interface
   1. Visual System
   2. Control System
   3. Audio, music, sound effects
   4. Help System
2. Artificial Intelligence
   1. Opponent and Enemy AI – The active opponent that plays against the game player and therefore requires strategic decision making
   2. Non-combat and Friendly Characters
3. Mod Art – Key assets, how they are being developed. Intended style.