

SYSTEM TEST DOCUMENT

Prepared by

Name	ID
Metin AKŐIT	1745728
Mustafa YÜKSEL	1819705
Emrah AYZ	1448406

Date: 03.05.2015

CONTENTS

1. Introduction 3

1.1. Document identifier 3

1.2. Scope 3

1.3. Purpose 3

2. Details for System Test Plan 3

2.1. Test Items and Their Identifiers 3

2.2. Features to be tested 3

3. Test Management 4

3.1. Planned Activities and Tasks; Test Progression 4

3.2. Environment/Infrastructure 4

4. Test Case Details 4

4.1. Inputs 4

4.2. Outcomes 4

4.3. Environmental Needs 4

4.4. Test Cases 4

4.4.1. Home Scene Test Case and Results 4

4.4.2. Settings Test Case and Results 5

4.4.3. Load Scene Test Case and Results 5

4.4.4. Create Character Scene Test Case and Results 6

4.4.5. Select Country Scene Test Case and Results 7

4.4.6. Select Party Scene Test Case and Results 8

4.4.7. Save Scene Test Case and Results 8

4.4.8. Main Scene Test Case and Results 9

4.4.9. Investment Scene Test Case and Results 10

4.4.10. Tax Scene Test Case and Results 11

4.4.11. Diplomacy Scene Test Case and Results 11

4.4.12. Improve Relations Scene Test Case and Results 12

4.4.13. Tribute Scene Test Case and Results 13

4.4.14. Make Turn Test Case and Results 14

5. System Test Report Details 17

5.1. Overview of Test Results 17

5.2. Detailed Test Results 18

5.3. Conclusion and Recommendations 18

1. Introduction

1.1. Document identifier

This report is the system test document of The President project.

1.2. Scope

This document presents the test cases and test results for The President. The general information about this report is provided in the Introduction chapter. In the rest of the chapters test cases and their results are presented in detail.

1.3. Purpose

The purpose of this document is to give information about the scope, resources and strategies of testing management. While testing this project according to the document, it is intended to manage these objectives:

- Detect the number of the defects in the project
- Try to observe the cases in different aspects
- Make the system perform as expected.

2. Details for system test plan

2.1. Test items and their identifiers

We choose every possible case in order to test. Therefore, we can able to understand whether which parts of the project is failed or not effectively.

2.2. Features to be tested

The features of the project are tested which are

- Home Scene
- Create Character Scene
- Select Country Scene
- Select Party Scene
- Save Scene
- Main Scene
- Investment Scene
- Tax Scene
- Diplomacy Scene
- Improve Relations Scene
- Tribute Scene
- Load Scene
- Settings Scene
- AI Law Proposal
- Law Acceptance
- AI Investment Level Decrease
- War System
- Tribute System
- Improve Relation System
- Public Happiness
- Make Turn

- Crisis System
- Election System
- Sound/Music System
- News System
- Protest System

2.3. Item pass/fail criteria

The item works what we expect or give the correct result or not.

3. Test management

3.1. Planned activities and tasks; test progression

We managed to check every possibility for finding and fixing bugs and make our project more efficient and enjoyable.

3.2. Environment/infrastructure

The testing was done from Unity (PC) and Android tablet.

4. Test case details

4.1. Inputs

- Pressing buttons
- AI gives decisions
- Randomly situation occasion

4.2. Outcome(s)

- See news panel
- See popups
- Check results from code
- See from UI elements

4.3. Environmental needs

Android device or Unity 5.1 in PC

4.4. Test Cases

4.4.1. Home Scene Test Case and Results

When we press the New Game Button, a new game should be initialized and Create Character Scene should be opened.

Test Case Name	Step	Expected Outcome	Test Result
New game	Pressing New game button	Initialize and Go to create character scene	Passed

When we press the Load Game Button, Load Scene should be opened.

Test Case Name	Step	Expected Outcome	Test Result
Load game	Pressing Load game button	Go to Load Scene	Passed

When we press the Settings Button, Settings Scene should be opened.

Test Case Name	Step	Expected Outcome	Test Result
Settings	Pressing Settings button	Go to Settings Scene	Passed

When we press the Quit Button, the game should be terminated.

Test Case Name	Step	Expected Outcome	Test Result
Quit	Pressing Quit Button	Terminate the game	Passed

4.4.2. Settings Test Case and Results

When we open the Settings Scene, we should see two checkboxes: one for the button sounds and one for the music in general. They should be checked by default. We should be able to open/close sound and music by these checkboxes.

Test Case Name	Step	Expected Outcome	Test Result
Open/Close Sound	Pressing sound checkbox	Open sound if closed, close if opened	Passed
Open/Close Music	Pressing music checkbox	Open music if closed, close if opened	Failed

When we press Done Button, the settings should be arranged according to the last values. If we press Escape, changes in the settings shouldn't be initialized. In both cases, the Home Scene should be opened.

Test Case Name	Step	Expected Outcome	Test Result
Close with new settings	Pressing Done Button	Save new settings, go back to Home Scene	Passed
Close without new settings	Pressing Escape	Go back to Home Scene with the old settings	Passed

4.4.3. Load Scene Test Case and Results

When we open the Load Scene, we should see a list of previously saved games with distinctive names and in descending order according to time. We should be able to see more previously saved games by slipping the list. When we click one of the elements in the list, we should see more details about it (character name, country name, party name, is the party

government, vote rate, which turn and so on). When we press the Load Button, the selected game should be loaded. When we press the Escape, the Home Scene should be opened.

Test Case Name	Step	Expected Outcome	Test Result
Observing the list	Opening the Load Scene	Observing the list with distinctive names and in descending order according to time	Passed
Reaching more previous saves	Slipping the list	The list should slip above so that we can see the more previous saves	Failed (the list doesn't slip)
Observing the details	Pressing an element of the list	The detailed information about that save should be seen in a separate area in the scene	Failed (that area hasn't been made yet)
Load a game	Pressing the Load Button	The selected saved game should be loaded	Passed
Closing the Load Scene	Pressing Escape	Go to the Home Scene	Passed

4.4.4. Create Character Test Case and Results

When we open the Create Character Scene, we should see the default avatar with right and left arrows and an input field to enter the character name.

When we press the arrows, available avatars should be seen.

Test Case Name	Step	Expected Outcome	Test Result
Change Avatar	Pressing right or left arrows	Change avatar	Passed

When we press the Done Button after entering a name, the Select Country Scene should be opened if there is no error.

Test Case Name	Step	Expected Outcome	Test Result
Input field Error Test1	Pressing Done button when input field is empty	Give an error	Passed

Test Case Name	Step	Expected Outcome	Test Result
Input field Error Test2	Pressing Done button when input field includes more than 10	Give an error	Passed

	characters		
--	------------	--	--

Test Case Name	Step	Expected Outcome	Test Result
Done	Pressing Done button without any input field problem	Save avatar, username and go to Country Select Scene	Passed

When we press the Escape, Home Scene should be opened and new game process should be cancelled.

Test Case Name	Step	Expected Outcome	Test Result
Back	Pressing Back button from Android navigation bar	Back to Home Scene and cancel new game process	Passed

4.4.5. Select Country Scene Test Cases and Results

When we open the Select Country Scene, we should see the default country's information such as its name, its flag, its initial power status by military, economy and technology levels with stars and an explanation about the country. We also should see right and left arrows to see other countries' information.

Test Case Name	Step	Expected Outcome	Test Result
Change Country Details1	Pressing right or left arrows	Change country explanation	Failed (explanations hasn't been adjusted yet)
Change Country Details2	Pressing right or left arrows	Change country name, flag and attributes	Passed

When we press Done Button, the game should initialize User Country as the current one and go to the Select Party Scene. If we press Escape, previously selected character name and avatar should be cancelled and Create Character Scene should be opened.

Test Case Name	Step	Expected Outcome	Test Result
Back	Pressing Back button from Android navigation bar	Back to Create Character Scene and de-initialize the character name & selected avatar	Passed
Done	Pressing Done button	Save country and go to Party Select Scene	Passed

4.4.6. Select Party Scene Test Cases and Results

When we open this scene, we should see the default party's information such as name, explanation, ideals according to religion, nationality and human rights and initial vote rate. The one with the highest initial vote rate should begin as the government at the beginning.

Test Case Name	Step	Expected Outcome	Test Result
Change Party Details 1	Pressing right or left arrows	Change party name, its ideal, its initial vote rate	Passed
Change Party Details 2	Pressing right or left arrows	Change party explanation	Failed (explanations hasn't been adjusted yet)

Test Case Name	Step	Expected Outcome	Test Result
Done	Pressing Done button	Save party and go to Save Scene	Passed

Test Case Name	Step	Expected Outcome	Test Result
Back	Pressing Back button from Android navigation bar	Back to Select Country Scene and de-select the previously selected country	Passed

4.4.7. Save Scene Test Cases and Results

This part will be removed soon and the initial save will be done automatically.

Test Case Name	Step	Expected Outcome	Test Result
Input field Shown	Player sees input field	Input field text is consists of username-country-turn	Passed

Test Case Name	Step	Expected Outcome	Test Result
Input field change	Player change input field	Save name changes	Passed

Test Case Name	Step	Expected Outcome	Test Result
Save	Pressing Save button	Save the game and go to Main Scene	Passed

Test Case Name	Step	Expected Outcome	Test Result
Back	Pressing Back button from Android	Back to Select Party Scene and cancel party selection	Passed

	navigation bar		
--	----------------	--	--

4.4.8. Main Scene Test Cases and Results

Test Case Name	Step	Expected Outcome	Test Result
See username, user country name, user party name, user party vote rate, avatar, country-party budgets, turn based income, turns left to election	Player sees from scene	Player can see username, user country name, user party name, user party vote rate, avatar, country-party budgets, turn based income, turns to election correctly	Passed

Player should see the latest news in the descending order according to time in the News Area.

Also, the player should see more on the list (in that turn's news) by slipping the area. News should be updated with every action concerning News.

Test Case Name	Step	Expected Outcome	Test Result
News	Scroll news panel	Player sees news about game	Passed

Test Case Name	Step	Expected Outcome	Test Result
Player Government	Player sees investment, tax and diplomacy button	Player can click to investment, tax and diplomacy buttons	Passed

Test Case Name	Step	Expected Outcome	Test Result
Player Opposition	Player sees investment, tax and diplomacy button	Player can click to investment, but cannot click to tax and diplomacy buttons	Passed

Test Case Name	Step	Expected Outcome	Test Result
Settings	Pressing settings icon	Settings details are shown as popup	Failed

Test Case Name	Step	Expected Outcome	Test Result
Back	Pressing Back button from Android navigation bar	Show escape popup with save& exit options	Failed

Test Case Name	Step	Expected Outcome	Test Result
Investment	Pressing Investment	Go to Investment Scene	Passed

	button		
--	--------	--	--

Test Case Name	Step	Expected Outcome	Test Result
Tax	Pressing Tax button (player government)	Go to Tax Scene	Passed

Test Case Name	Step	Expected Outcome	Test Result
Diplomacy	Pressing Diplomacy button (player government)	Go to Diplomacy Scene	Passed

4.4.9. Investment Scene Test Cases and Results

Test Case Name	Step	Expected Outcome	Test Result
See every investment's rate of party demand over current level	Player sees from scene	Player can see every investment's rate of party demand over current level and its change dynamically	Passed

Test Case Name	Step	Expected Outcome	Test Result
Investment Button	Pressing one of the investments	Show popup which includes other parties acceptance rate-vote rate, cost of level increase	Passed

Test Case Name	Step	Expected Outcome	Test Result
Investment Popup	Pressing Increase button	Popup is closed and this level's law is proposed	Passed

Test Case Name	Step	Expected Outcome	Test Result
Investment Popup Decrease Button Player Government	Pressing Decrease button	Popup is closed and investment level decreases and the amount of money coming from it is added to country budget	Passed

Test Case Name	Step	Expected Outcome	Test Result
Investment Popup Decrease Button Player Opposition	Pressing Decrease button	Player cannot press decrease button	Passed

Test Case Name	Step	Expected Outcome	Test Result
Investment Popup Cancel Button	Pressing Cancel button	Popup is closed and no law is proposed	Passed

Test Case Name	Step	Expected Outcome	Test Result
Investment Propose a second law	Pressing one investment button and opening popup then pressing increase button again	Gives an error about cannot propose a law again	Passed

Test Case Name	Step	Expected Outcome	Test Result
Back	Pressing Back button from Android navigation bar	Go to Main Scene	Passed

4.4.10. Tax Scene Test Cases and Results

Test Case Name	Step	Expected Outcome	Test Result
See protest probability and public happiness	Player sees from scene	See protest and public happiness rate with changing scroll bar	Failed

Test Case Name	Step	Expected Outcome	Test Result
Tax rate	Showing tax rate and change from scroll bar and pressing Done Button	Tax rate changes and public happiness rate also changes	Passed

Test Case Name	Step	Expected Outcome	Test Result
Back	Pressing Back button from Android navigation bar	Go to Main Scene	Passed

4.4.11. Diplomacy Scene Test Cases and Results

Test Case Name	Step	Expected Outcome	Test Result
Diplomacy Details1	Pressing right or left arrows	Change country name, flag	Passed

Test Case Name	Step	Expected Outcome	Test Result
Diplomacy Details2	Pressing right or left arrows	See country's total point, see player country's total point and	Passed

		relationship between these 2 countries	
--	--	--	--

Test Case Name	Step	Expected Outcome	Test Result
Diplomacy Details3	Pressing right or left arrows	Change target country and its total point	Passed

Test Case Name	Step	Expected Outcome	Test Result
Diplomacy Details4	After any diplomacy action	Observe the relation change	Failed

Test Case Name	Step	Expected Outcome	Test Result
Improve relation	Pressing improve relation button	Go to improve Relation Scene	Passed

Test Case Name	Step	Expected Outcome	Test Result
Tribute	Pressing Demand Tribute Button	Go to Tribute Scene	Passed

Test Case Name	Step	Expected Outcome	Test Result
Make War1	Pressing Make War Button	Declare a war against chosen country	Passed

Test Case Name	Step	Expected Outcome	Test Result
Make War2	Pressing Make War Button	Go to In War Scene which blocks any diplomacy action during war	Failed

4.4.12. Improve Relations Scene Test Cases

Test Case Name	Step	Expected Outcome	Test Result
Input Field Error1	Give character which are not digits	Give an Error	Passed

Test Case Name	Step	Expected Outcome	Test Result
Input Field Error2	Give character which its length more than 10	Seen input field 99999999	Passed

Test Case Name	Step	Expected Outcome	Test Result
Change turn	Pressing left or right	Change turn number from 1 to	Passed

numbers	arrows	10	
---------	--------	----	--

Test Case Name	Step	Expected Outcome	Test Result
Ok	Pressing OK Button	Do improve relations process with typed money and turns correctly and go to Main Scene	Failed

4.4.13. Tribute Scene Test Cases and Results

Test Case Name	Step	Expected Outcome	Test Result
Input Field Error1	Give character which are not digits	Give an Error	Passed

Test Case Name	Step	Expected Outcome	Test Result
Input Field Error2	Give character which its length more than 10	Seen input field 99999999	Passed

Test Case Name	Step	Expected Outcome	Test Result
Change turn numbers	Pressing left or right arrows	Change turn number from 1 to 10	Passed

Test Case Name	Step	Expected Outcome	Test Result
Ok	Pressing OK Button	Do tribute process with typed money and turns correctly and go to Main Scene	Passed

4.4.14. Make Turn Test Cases and Results

Test Case Name	Step	Expected Outcome	Test Result
Player proposes a law1	Pressing Make Turn Button	If player's proposal accepts from majority of AI parties, this investment level should increase and it is seen from news panel. Expense of increasing investment level should decrease budget correctly. Moreover, if this investment level changes income, income text should be changed.	Passed

Test Case Name	Step	Expected Outcome	Test Result
Player proposes a law2	Pressing Make Turn Button	If player's proposal did not accept from majority of AI parties, this investment level should not increase and it is seen from news panel	Passed

Test Case Name	Step	Expected Outcome	Test Result
AI parties propose a law1	Pressing Make Turn Button	If AI proposal accepts from majority of AI parties, this investment level should increase and it is seen from news panel. Expense of increasing investment level should decrease budget correctly. Moreover, if this investment level changes income, income text should be changed.	Passed

Test Case Name	Step	Expected Outcome	Test Result
AI parties propose a law2	Pressing Make Turn Button	If AI proposal did not accept from majority of AI parties, this investment should not increase and it is seen from news panel	Passed

Test Case Name	Step	Expected Outcome	Test Result
AI parties propose a law3	Pressing Make Turn Button	This proposal should be asked to player and he or she can accept or decline this proposal	Failed

Test Case Name	Step	Expected Outcome	Test Result
Player declare a war	Pressing make turn button	Declaration detail should be seen from news panel and the result also should be seen from news panel. Moreover, if player loses then it's country's some investment should be decreased and enemy AI earns money or if player wins then its country earns money and enemy AI country's some investment levels should be decreased or if the result is draw then both countries' some investment levels should be decreased.	Passed

Test Case Name	Step	Expected Outcome	Test Result
AI declare a war	Pressing make turn button	Declaration detail should be seen from news panel and the result also should be seen from news panel. Moreover, if player loses then it's country's some investment should be decreased and enemy AI earns money or if player wins then its country earns money and enemy AI country's some investment levels should be decreased or if the result is draw then both countries' some investment levels should be decreased.	Passed

Test Case Name	Step	Expected Outcome	Test Result
Player demands tribute	Pressing make turn button	Declaration detail should be seen from news panel and the result also should be seen from news panel.	Failed

Test Case Name	Step	Expected Outcome	Test Result
Player demands tribute	Pressing make turn button	If AI accepts the tribute then it should give the amount of money to player's country for specific turns.	Passed

Test Case Name	Step	Expected Outcome	Test Result
AI demands tribute	Pressing make turn button	If Player accepts the tribute then player should give the amount of money to AI country for specific turns or if player do not accept the tribute then player do not give any money to AI country however, the relationship between them becomes worse.	Failed

Test Case Name	Step	Expected Outcome	Test Result
Player improve relation	Pressing make turn button	Player gives an amount of money to AI country for specific turns and the relationship between them becomes worse.	Failed

Test Case Name	Step	Expected Outcome	Test Result
Player government Public Happiness Changes	Pressing make turn button	The situation of war, crisis or satisfaction from proposing laws public happiness can be changed	Failed

Test Case Name	Step	Expected Outcome	Test Result
AI government Public Happiness Changes	Pressing make turn button	The situation of war, crisis or satisfaction from proposing laws public happiness can be changed	Failed

Test Case Name	Step	Expected Outcome	Test Result
Player protest	Pressing make turn button	The situation of protest, player confronts a popup which includes two choices which are go early election or give bribe. If player has money then he or she can give bribe or if player accepts early election then one turn later there will be an election. All of these are seen from news panel.	Passed

Test Case Name	Step	Expected Outcome	Test Result
AI protest	Pressing make turn button	The situation of protest, if AI has money then gives it and suppresses it. On the other hand, it accepts early election and there will be an election one turn later. All of these are seen from news panel.	Passed

Test Case Name	Step	Expected Outcome	Test Result
Election	Pressing make turn button	In election turn, the votes are distributed and government and oppositions are detected	In some cases failed/some cases passed

Test Case Name	Step	Expected Outcome	Test Result
AI Tax	Pressing make turn button	AI can change tax rate and it can give this decision to see public happiness and income situations	Failed

Test Case Name	Step	Expected Outcome	Test Result
AI level decrease	Pressing make turn button	AI can give the decision of decreasing level and this decision gives looking at budget situation	Failed

Test Case Name	Step	Expected Outcome	Test Result
Crisis	Pressing make turn button	There can be a random crisis which give damage to some investment levels	Failed

5. System test report details

5.1. Overview of test results

We prepared 85 test cases and try it from both Computer and Android tablet.

Passed values are shown below:

- Home Scene => 4/4 passed
- Settings Scene => 3/4 passed
- Load Scene => 3/5 passed
- Create Character Scene => 5/5 passed
- Select Country Scene => 3/4 passed
- Select Party Scene => 3/4 passed
- Save Scene => 4/4 passed
- Main Scene => 8/9 passed
- Investment Scene => 8/8 passed

- Tax Scene => 2/3 passed
- Diplomacy Scene => 6/8 passed
- Improve Relations => 3/4 passed
- Tribute Scene => 4/4 passed
- Make Turn => 9/19 passed and 1 pass/fail in some cases

5.2. Detailed test results

- We almost did Home- Create Character- Save- Investment- Tribute Scenes.
- There is a small bug in setting scene which is not working in music on/off situation, but its infrastructure is done.
- There is some problem in load scene about slipping list and detailed save information.
- In select country scene, country information should be added.
- In select party scene, party information should be added.
- Settings popup should be added to main scene settings icon.
- Should be added protest probability and public happiness feature to tax scene.
- To diplomacy scene, observing relation changes and blocking diplomacy scene when war in progress properties should be added.
- Do improve relation feature should be added to project.
- When AI proposes a law, player can accept or decline it.
- Tribute details should be seen from news panel.
- AI can demand tribute and player can accept or decline it. This case's infrastructure is ready.
- Player can see changings in public happiness.
- AI can change public happiness in case of war, crisis or satisfaction from proposing laws.
- Election should be totally renewed.
- AI can increase or decrease tax rate to see public happiness and budget.
- AI can decrease investment level and this decision is made from seeing public happiness and budget.
- Crisis feature will be added.

5.3. Conclusions and recommendations

In conclusion, this document gives us a chance to see deficient parts of the project. Also, we should fix all of bugs and complete all incomplete features.