System Request Summary

Project Sponsor: -

Business Need: This project has been initiated for two goals:

- To reach a significant amount of game players by taking advantage of defiency about wrestling in game industry.
- To introduce simulation gamers an old and fundamental sport, wrestling

Business Requirements:

- Provide player an opportunity to manage a wretling team
- Include in-game features such as transfer, training, managing team
- Include save/load game option
- Create accurate match results by using player attributes
- Develop the project as open source and let other programmers contribute or modify

Business Value:

This project is non-profit and expects no income, but any donates are acceptable.

Special Issues or Constraints:

- The game will consist of accurate wrestling datas and informations. This issue will be handled by our sofware analyst.
- Real team and player informations will not be used to avoid reconciliation issues.

Main Activities of the Project

1. Planning
2. Content researching
3. Analysis
4. System design
5. Coding
6. Testing
7. Delivery

Required Effort and Duration For Completion

Parameters:

i. **Inputs**

- Menu selection
- Saved game file
- Team selection
- Training preference
- Transfer proposal

ii. **Outputs**

- Fixture
- Team/Player Standings
- Match highlights
- Transfer list
- Loading saved game
- Team line-up

iii. **Queries**

- Get match dates for fixture
- Calculate standings by using match results
- Generate match results by using wrestler attributes
- Check transfer rules
- Fetch existing game datas
- Update wrestler attribute after training

iv. **Files**

- Default database

v. **External Interface**

- *tgf.gov.tr* external data bank (for reference)

Unadjusted Function Point Calculation

	Low	Medium	High	Total
Input (6)	1*3	3*4	2*6	27
Output (6)	2*4	2*5	2*7	32
Query (6)	1*3	1*4	4*6	31
File (1)	0*7	0*10	1*15	15
Ext. Int. (0)	0*5	0*7	1*10	10
				115

System Characteristics

1. Data Communications: 3
2. Distributed functions: 0
3. Performance: 0
4. Heavy used configuration: 0
5. Transaction rate: 0
6. Online data entry: 0
7. End user efficiency: 2
8. Online update: 0
9. Complex processing: 0
10. Reusability: 2
11. Installation ease: 0

12. Operational ease: 1

13. Multiple sites: 0

14. Facilitate change: 0

15. Extensibility: 1

16. Backup & Recovery: 1

Total: 10

Adjusting the Functions Points

Total Processing Complexity = 10

Adjusted process = 0.65 + (0.01*10) = 0.75

Total adjusted function point = 0.75*115 = 86.25

Function point to lines of codes for *Python* = 67

Lines of codes = 86.25*67 = 5778.75

Required Effort

Effort in Person Months = 1.4*5.77875 = 8.09025 Person Months

Schedule Time (Months) = 3.0 * $(8.09025)^{1/3}$ = 6.02