

# **RFP**

U.S. Army - Flagship First Person Shooter Development Proposal

11/14/2013

### **Project Charter**

### **Project Authorization**

This Project Charter formally authorizes a project to design and develop training for current and future U.S. Army leaders. A project plan will be developed and submitted to the Project Sponsor for approval. Commencement of project activities will begin upon approval of the project plan and the resources to execute it by the Project Sponsor. Included in the project plan are to be a scope statement; schedule; cost estimate; budget; and provisions for scope, resource, schedule, communications, quality, risk, procurement, and stakeholder management as well as project control.

### **Problem**

The U.S. Army Program Executive Office for Simulation, Training and Instrumentation (PEO STRI) is issuing a Request for Proposal (RFP) for the procurement of a new Flagship First Person Shooter (FPS). The new FPS based game and tools should include, but is not limited, to the components and capabilities of the current FPS game, Virtual Battlespace 2 (VBS2), as described in the provided Program Description.

### **Objectives**

Create a First Person Shooter simulation game that incorporates current and possible future battle situations, using realistic weaponry, scenery, and scenarios into combat game-play which allows the user to either play independently and learn new tactics, strategies, and other information, or through MMO communities to allow for groups to compete in realistic warfare. After implementation, this FPS game will allow military personnel to interact, learn, and strategize with one another on current and possible future situations, enacting battle strategies, learning and applying valuable skills and knowledge which are integral parts of the work they do. After playing this game, the user should be able to:

- Apply strategies in realist warfare situations Accurately select and utilize weaponry
- Respond to threats appropriately
- Analyze threat situations and take appropriate actions
- Work within a team to achieve a common goal

### **Success Criteria**

The training program must meet all written specifications as indicated by the U.S. Army Program Executive Office for Simulation, Training, and Instrumentation (PEO STRI) and subject matter expert, must be thoroughly tested, and completed on time. The U.S. Army PEO STRI will formally approve the project with advice from other key stakeholders.

### **Approach**

- Within one month, develop a clear work breakdown structure, scope statement, and Gantt chart detailing work required to complete the training project.
- Within initial month, meet with Raytheon to coordinate development.
- Instructional designers conduct front-end analysis by observing, interviewing, and reviewing documentation to generate specific performance measures, gaps, and instructional objectives.
- Contract writer and graphic designer as needed based on projected schedule.
- Hold weekly progress meetings with the project team and client.
- Conduct tryout with military personnel and leaders.

### **Schedule**

The project will take approximately 9 months with the initial 450 trainers trained by the end of 4th fiscal quarter 2014 per contract specifications.

## **Budget**

The budget for the U.S. Army - Flagship First Person Shooter project is \$1.2 million U.S. Dollars. A full detailed budget will be submitted to the U.S. Army PEO STRI office for final approval before development begins.

#### **Table of Contents**

Project Charter 2

Introduction 5

Problem 5

Project Objectives 5

Approach 6

Success Criteria 6

Key Deliverables 6

Resources Required 7

#### Description 8

Organizational Chart 8

Responsibility Assignments Matrix 9

Project Responsibility Matrix 9

Required Resources 10

Management and Technical Processes 11

Management Objectives 11

Strategies for Implementation 12

Project Controls 12

Risk Management 13

Technical Processes 13

Major Work Packages 14

Schedule 18

Budget 19

Appendix A: Glossary of Terms 22

Appendix B: Gantt Chart 23

Appendix C: Detailed Budget 24

### **Introduction**

Project Sponsor: General Dr. Pastore, Director, U.S. Army PEO STRI

### **Project Manager**

NAME	POSITION/ROLE	CONTACT INFORMATION		
Dave Munson- DittoDesign	Project Manager/Manager	dem7820@uncw.edu		

### **Problem**

The U.S. Army Program Executive Office for Simulation, Training and Instrumentation (PEO STRI) is issuing a Request for Proposal (RFP) for the procurement of a new Flagship First Person Shooter (FPS). The new FPS based game and tools should include, but is not limited, to the components and capabilities of the current FPS game, Virtual Battlespace 2 (VBS2), as described in the provided Program Description.

### **Project Objectives**

Create a First Person Shooter simulation game that incorporates current and possible future battle situations, using realistic weaponry, scenery, and scenarios into combat game-play which allows the user to either play independently and learn new tactics, strategies, and other information, or through MMO communities to allow for groups to compete in realistic warfare. After implementation, this FPS game will allow military personnel to interact, learn, and strategize with one another on current and possible future situations, enacting battle strategies, learning and applying valuable skills and knowledge which are integral parts of the work they do. After playing this game, the user should be able to:

- Apply strategies in realist warfare situations
- Accurately select and utilize weaponry
- Respond to threats appropriately
- Analyze threat situations and take appropriate actions
- Work within a team to achieve a common goal

### **Approach**

- Within one month, develop a clear work breakdown structure, scope statement, and Gantt chart detailing work required to complete the training project.
- Within initial month, meet with Raytheon to coordinate development.
- Instructional designers conduct front-end analysis by observing, interviewing, and reviewing documentation to generate specific performance measures, gaps, and instructional objectives.
- Contract writer and graphic designer as needed based on projected schedule.
- Hold weekly progress meetings with the project team and client.
- Conduct tryout with military personnel and leaders.

#### **Success Criteria**

The training program must meet all written specifications as indicated by the U.S. Army Program Executive Office for Simulation, Training, and Instrumentation (PEO STRI) and subject matter expert, must be thoroughly tested, and completed on time. The U.S. Army PEO STRI will formally approve the project with advice from other key stakeholders.

### **Key Deliverables**

- Instructor's Manual
  - Trainer's handbook/guidebook with training directions, training scripts, and guidelines for all training activities.
- Trainee Manual
  - Trainee handbook/guidebook will include:
    - a. Table of Contents
    - b. Training Rules & Regulations
    - c. Training Modules

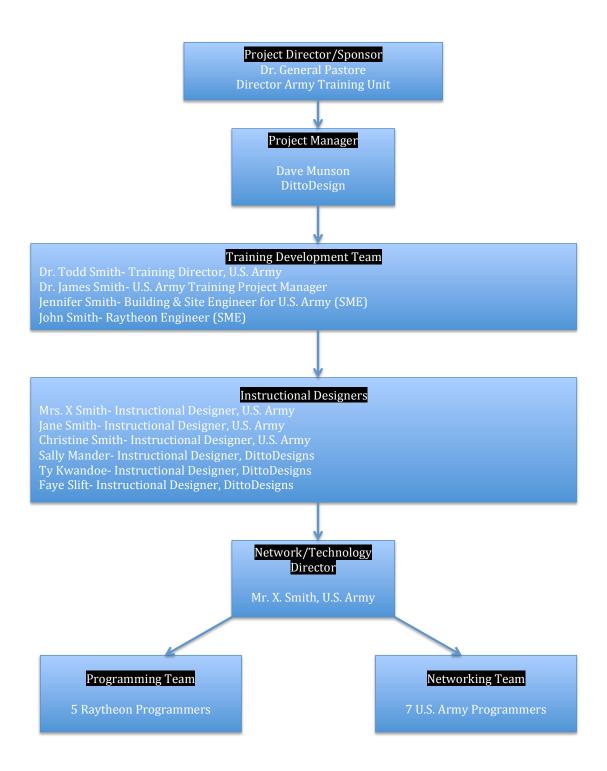
- d. Glossary of Terms
- e. Job Aids
- First Person Shooter Video Game
- Project Charter
- Project Scope
- Project Plan
- Project Schedule
- Project Management
- Project Risk Management
- Project Budget

### **Resources Required for the Project**

- Computer equipment- servers, desktops, laptops
- Gaming equipment- xBox, PS3, and related gaming accessories
- Software- Unity, Adobe Gaming SDK, Dreamweaver, MS Office
- High speed Internet access
- Sandbox server for software testing
- Access to SME's
- Access to military operations information
- Military personnel to test final prototypes

### **Description**

### **Organizational Chart**



# **Responsibility Assignment Matrix**

Team	Responsibilities
Project Director	Supervises overall development of project
Project Manager	Manages entire project until completion
Training Development Team	Develops components of training
Instructional Designers	Develops instructional design of training based on training needs
Network/Technology Director	Supervises overall development of software and computer technologies
Networking Team	Develops, implements, and maintains computer technologies
Programming Team	Develops the First Person Shooter gaming software

# **Project Responsibilities Matrix**

A= Approval Needed P=Performs Task

	Charter Approval & Sign Off	Plan Development & Approval	Simulation Development	Create & Approve Training Plan	Develop & Deliver Training Plan
General Dr. Pastore	А	А	А	А	А
Dave Munson	Р	А	А	Р	А
Faye Slift	А	А	Р	Р	Р
Beau Tokks	А	Р	Р	Р	Р
Ty Kwandoe	А	Р	Р	Р	Р

	Charter Approval & Sign Off	Plan Development & Approval	Simulation Development	Create & Approve Training Plan	Develop & Deliver Training Plan
Dr. Todd Smith	А	А	А	Р	Р
Dr. James Smith	А	А	А	Р	Р
Christine Smith	А			Р	Р
Jane Smith	А			Р	Р
Mrs. X Smith	А			Р	Р
Networking Team	А	А	Р	А	
John Smith	А	Р	Р		
Raytheon Programming Team	А	Р	Р		
Jennifer Smith	А			А	Р

### **Resources Required for the Project**

- Computer equipment- servers, desktops, laptops
- Gaming equipment- xBox, PS3, and related gaming accessories
- Software- Unity, Adobe Gaming SDK, Dreamweaver, MS Office
- High speed Internet access
- Sandbox server for software testing
- Access to SME's
- Access to military operations information
- Military personnel to test final prototypes

### **Management and Technical Processes**

### **Facilities & Equipment**

All facilities will be a joint space shared by DittoDesign personnel and Raytheon personnel which will be approved by the U.S. Military based upon security requirements. Initial design computer equipment will be provided by DittoDesign until prototype testing, which will then require access to the equipment provided by the U.S. military.

### **Travel Needs**

- Travel needs will be dependent upon final design testing.
- Travel will be budgeted as a separate line item fee.

### Other Org. Related Information

The U.S. Army PEO STRI (Program Executive Office for Simulation, Training and Instrumentation) is the center of acquisition excellence for simulation, training and testing solutions for the Army and joint community. PEO STRI puts the power of simulation into the hands of Warfighters by developing, acquiring, fielding and sustaining cutting-edge, crossdomain and interoperable capabilities.

### **Management Objectives**

Management will focus on achievable goals to accomplish the best possible results while adhering to budget, time, and scope of the project.

#### Management will:

- 1. Build project team and assign duties.
- 2. Establish and maintain communication channels with sponsor and key team members.
- 3. Control and monitor the project phases.
- 4. Forecast, Plan, and Address project changes.
- 5. Ensure project is focused on objectives.

- 6. Ensure project adheres to budget, time, and scope of the project.
- 7. Ensure project completion accomplishes all previously agreed upon objectives and goals.

### Strategies for Implementation of Project

- Apply strategies in realistic warfare situations
- Accurately select and utilize weaponry
- Respond to threats appropriately
- Analyze threat situations and take appropriate actions
- Work within a team to achieve a common goal

### **Project Controls**

The following actions will be put in place as Project Controls to help ensure that any issues and/or changes are addressed in a timely manner to keep the project on schedule, within budget, and within agreed upon scope:

- Should a change occur affecting project schedule, budget, or scope, a changer order will be written and approved by the Project Sponsor before the change is implemented.
- The Project Manager will monitor and control the project schedule, budget, and scope as defined in the Project Management Plan and update PMP as needed.
- Weekly Status/Progress Report will be submitted to the Project Sponsor.
- Bi-Weekly Project Team meetings to discuss project status, identify areas of excellence, and identify areas that need improvement.
- Content created will require approval of Project Sponsor before implementing.
- All updates will be approved by the project Sponsor.
- All Training Packages will be reviewed and approved by Project Sponsor.

### **Risk Management**

Risk Management is vital to the success of this project and will be of utmost importance throughout the project. Risk management will include the forecasting, identification, analysis, and resolution of potential risks. Every effort will be made to proactively identify risks ahead of time in order to implement a mitigation strategy from the project's onset. The most likely and highest impact risks were added to the project schedule to ensure that the assigned risk managers take the necessary steps to implement the mitigation response at the appropriate time during the schedule. Risk managers will provide status updates on their assigned risks in the bi-weekly project team meetings, but only when the meetings include their risk's planned timeframe.

Upon the completion of the project, during the closing process, the project manager will analyze each risk as well as the risk management process. Based on this analysis, the project manager will identify any improvements that can be made to the risk management process for future projects. These improvements will be captured as part of the lessons learned knowledge base.

### **Technical Processes**

This project will be producing the First Person Shooter video game for U.S. Army training purposes. The game will designed using Adobe Game SDK and Unity. The Project Developers Secure Website will be designed using Adobe Dreamweaver with the content being maintained by WordPress. All email communications will be conducted using Microsoft Outlook.

### **Major Work Packages**

The project Work Breakdown Structure is as follows:

### 1. First Person Shooter Project Management System

#### 1.1 Initiation

- 1.1.1 Evaluation & Recommendations
- 1.1.2 Develop Project Charter
- 1.1.3 Deliverable: Submit Project Charter
- 1.1.4 Project Sponsor Reviews Project Charter
- 1.1.5 Project Charter Signed/Approved

### 1.2 Planning

- 1.2.1 Create Preliminary Scope Statement
- 1.2.2 Determine Project Team
- 1.2.3 Project Team Kickoff Meeting
- 1.2.4 Develop Project Plan
- 1.2.5 Submit Project Plan
- 1.2.6 Milestone: Project Plan Approval

#### 1.3 Execution

- 1.3.1 Project Kickoff Meeting
- 1.3.2 Verify & Validate User Requirements
- 1.3.3 Design Game System
- 1.3.4 Procure Hardware/Software
- 1.3.5 Development of System
- 1.3.6 Testing Phase
- 1.3.7 Install Live System
- 1.3.8 User Training
- 1.3.9 Go Live

#### 1.4 Control

- 1.4.1 Project Management
- 1.4.2 Project Status Meetings
- 1.4.3 Risk Management

#### 1.4.4 Update Project Management Plan

#### 1.5 Closeout

- 1.5.1 Audit Procurement
- 1.5.2 Document Lessons Learned
- 1.5.3 Update Files/Records
- 1.5.4 Gain Formal Acceptance
- 1.5.5 Archive Files/Documents

#### **Tasks Defined**

### 1 First Person Shooter Project Video Game Training System

All work to implement a new project.

#### 1.1 Initiation

The work to initiate the project.

#### 1.1.1 Evaluation & Recommendations

Working group to evaluate solution sets and make recommendations.

#### 1.1.2 Develop Project Charter

Project Manager to develop the Project Charter.

#### 1.1.3 Deliverable: Submit Project Charter

Project Charter is delivered to the Project Sponsor.

#### 1.1.4 Project Sponsor Reviews Project Charter

Project sponsor reviews the Project Charter.

#### 1.1.5 Project Charter Signed/Approved

The Project Sponsor signs the Project Charter which authorizes the Project Manager to move to the Planning Process.

#### 1.2 Planning

The work for the planning process for the project.

#### 1.2.1 Create Preliminary Scope Statement

Project Manager creates a Preliminary Scope Statement.

### 1.2.2 Determine Project Team

The Project Manager determines the project team and requests the resources.

### 1.2.3 Project Team Kickoff Meeting

The planning process is officially started with a project kickoff meeting which includes the Project Manager, Project Team and Project Sponsor (optional).

### 1.2.4 Develop Project Plan

Under the direction of the Project Manager the team develops the project plan.

### 1.2.5 Submit Project Plan

Project Manager submits the project plan for approval.

### 1.2.6 Milestone: Project Plan Approval

The project plan is approved and the Project Manager has permission to proceed to execute the project according to the project plan.

#### 1.3 Execution

Work involved to execute the project.

#### 1.3.1 Project Kickoff Meeting

Project Manager conducts a formal kick off meeting with the project team, project stakeholders and project sponsor.

#### 1.3.2 Verify & Validate User Requirements

The original user requirements is reviewed by the project manager and team, then validated with the users/stakeholders. This is where additional clarification may be needed.

### 1.3.3 Design Game System

The technical resources design the new First Person Shooter video game system.

#### 1.3.4 Procure Hardware/Software

The procurement of all hardware, software and facility needs for the project.

#### 1.3.5 Install Development System

Team installs a development system for testing and customizations of user interfaces.

#### 1.3.6 Testing Phase

The system is tested with a select set of users.

#### 1.3.7 Install Live System

The actual system is installed and configured.

#### 1.3.8 User Training

All users are provided with a four hours training class. Additionally, managers are provided with an additional two hours class to cover advanced reporting.

#### 1.3.9 Go Live

System goes live with all users.

#### 1.4 Control

The work involved for the control process of the project.

### 1.4.1 Project Management

Overall project management for the project.

### 1.4.2 Project Status Meetings

Weekly team status meetings.

### 1.4.3 Risk Management

Risk management efforts as defined in the Risk Management Plan.

### 1.4.4 Update Project Management Plan

Project Manager updates the Project Management Plan as the project progresses.

#### 1.5 Closeout

The work to close-out the project.

#### 1.5.1 Audit Procurement

An audit of all hardware and software procured for the project, ensures that all procured products are accounted for and in the asset management system.

#### 1.5.2 Document Lessons Learned

Project Manager along with the project team performs a lessons learned meeting and documents the lessons learned for the project.

#### 1.5.3 Update Files/Records

All files and records are updated to reflect the widget management system.

#### 1.5.4 Gain Formal Acceptance

The Project Sponsor formally accepts the project by signing the acceptance document included in the project plan.

#### 1.5.5 Archive Files/Documents

All project related files and documents are formally archived.

### **Schedule**

### **Summary Schedule**

The project will begin on Jan 1, 2014 to create a management plan to develop the First Person Shooter software and train the 450 trainers by the end of the 4th Fiscal Quarter 2014 (9/30/14).

### **Key Dates:**

January 8, 2014- Develop Project Charter

January 20, 2014- Submit Project Charter

January 7, 2014- Project Charter Approved

February 3, 2014- Project Team Kickoff Meeting

February 25, 2014- Project Plan Approval

February 26, 2014- Project Kickoff Meeting

March 10, 2014- Design Game System

April 01, 2014- Procure Hardware/Software

May 01, 2014- Development of System

June 3, 2014- Testing Phase

June 30, 2014- Install Live System

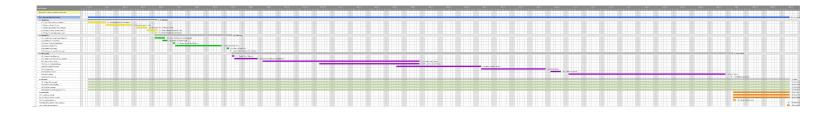
July 7, 2014- User training begins

September 8, 2014- System goes live

September 9 - 30, 2014- Project closeout

### Detailed Schedule (Gantt Chart): See Appendix B and it can also be

viewed at: <a href="https://www.edu/dem7820/FPSGanttChart.pdf">ArcMit01.uncw.edu/dem7820/FPSGanttChart.pdf</a>



### **Budget**

### **Summary Budget**

DittoDesign has submitted a fixed price bid of \$1,092,670.00 to fulfill the requirement of a Firm Fixed price (FFP) contract. All cost overruns will be incurred by DittoDesign due to the nature of the contract bidding process.

### **Detailed Budget:**

See Appendix C

### **Qualifications of DittoDesign:**

DittoDesign, established in 2003, is a locally owned Wilmington, NC based design firm that excels in designing and developing training programs specifically tailored to the client's needs. DittoDesign has produced training for the U.S. military, the U.S. Government, several Fortune 500 companies, and small businesses worldwide. DittoDesign has two (2) PMI certified Project Managers on staff to assist in on-time and on-budget project delivery.

### **Project Staffing**

The project staffing will consist of the U.S. Army Team, Raytheon Team, and the following team members from DittoDesign listed below:

### Dave Munson, Project Manager

Mr. Munson is the owner and Lead Instructional Designer at Ditto Design. He received his B.S. in French from Penn State University and holds an M.S. in Instructional Technology from the University of North Carolina at Wilmington. He has worked on numerous large projects with the U.S. Military over the past 5 years, including designing training programs for the U.S. Army's new Cyborg Warrior Project (CWP) and the U.S. Air Force's 6S Project (Super Secret Stealth Spinning Space Saucer).

### **Faye Slift, Lead Instructional Designer**

Ms. Slift has been the Lead Instructional Designer at Ditto Design since 2004. She holds a B.A. in Fine Arts from University of San Diego and an M.A. in Graphic Design from Ohio State University. She has been involved in the design and implementation of numerous U.S. Military training programs. She specializes in Graphics and Animation.

### **Beau Tokks, Instructional Designer**

Mr. Tokks has been an Instructional Designer at DittoDesign since 2007. He holds a B.S. in Computer Science from Carnegie-Mellon University and holds an M.S. in Gaming Technology from Full Sail University. Mr. Tokks has previous experience with Nintendo and the PlayStation division of Sony. He specializes in Gaming Design.

### Ty Kwandoe, Instructional Designer

Mr. Kwandoe has been an Instructional Designer at DittoDesign since 2009. He holds a B.S. in Secondary Education from the McGill University and an M.S. in Instructional Design from Florida State University. Mr. Kwandoe has previous experience as a high school English teacher and as a Corporate Trainer for the Apple Stores. He specializes in Assessment.

#### Ivanna Mann, Intern

Ms. Mann is an intern from the University of North Carolina Wilmington where she is pursuing her M.S. in Instructional Technology. Ms. Mann will assist as needed on the Project and will be under the direct supervision of the Lead Instructional Designer.

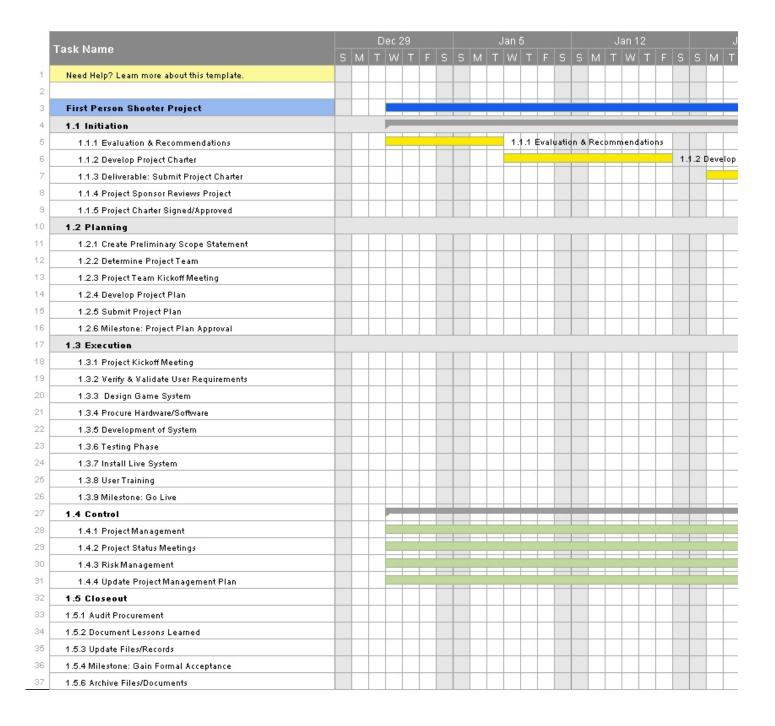
### **Appendix A: Glossary of terms**

- Allocation is the assignment of available resources in an economic way.
- Budget generally refers to a list of all planned expenses and revenue.
- Budgeted cost of work performed (BCWP) measures the budgeted cost of work that has actually been performed, rather than the cost of work scheduled.
- Budgeted cost of work scheduled (BCWS) the approved budget that has been allocated to complete a scheduled task (or Work Breakdown Structure (WBS) component) during a specific time period.
- Cost overrun is defined as excess of actual cost over budget.
- Deliverable A contractually required work product, produced and delivered to a required state. A deliverable may be a document, hardware, software or other tangible product.
- Gantt chart is a type of bar chart that illustrates a project schedule. It illustrate the start and finish dates of the terminal elements and summary elements of a project. Terminal elements and summary elements comprise the work breakdown structure of the project.
- Kickoff meeting is the first meeting with the project team and the client of the project.
- Process is an ongoing collection of activities, with an inputs, outputs and the energy required to transform inputs to outputs.
- Project management is the complete set of tasks, techniques, tools applied during project execution.
- Project manager is a professional in the field of project management. Project managers
  can have the responsibility of the planning, execution, and closing of any project,
  typically relating to construction industry, architecture, computer networking,
  telecommunications or software development.
- Project stakeholders are those entities within or without an organization which sponsor a
  project or, have an interest or a gain upon a successful completion of a project.
- Task analysis is the analysis or a breakdown of exactly how a task is accomplished, such as what sub-tasks are required.
- Work Breakdown Structure (WBS) is a tool that defines a project and groups the
  project's discrete work elements in a way that helps organize and define the total work
  scope of the project. A Work breakdown structure element may be a product, data, a
  service, or any combination. WBS also provides the necessary framework for detailed
  cost estimating and control along with providing guidance for schedule development and
  control.

### **Appendix B: Abbreviated Gantt Chart\***

\* The entire Gantt Chart can be viewed and printed at:

#### ArcMit01.uncw.edu/dem7820/FPSGanttChart.pdf



# **Appendix C: Detailed Budget**

# BUDGET SHEET

US-GAAP

#### **DESIGN & DEVELOPMENT**

PROJECT STAFF	HOURLY RATE	HOURS	TOTAL
Project Manager	\$125	39 weeks x 40hrs =1560	\$195,000
Lead Instructional Designer	\$100	26 weeks x 40hrs=1040	\$104,000
Instructional Designer 1	\$75	26 weeks x 40hrs=1040	\$78,000
Instructional Designer 2	\$75	26 weeks x 40hrs=1040	\$78,000
Administrative Assistant	\$22	39 weeks x 40hrs=1560	\$34,320
Testing	\$50	12 weeks x 40hrs=480	\$24,000
TOTAL STAFF COST		6240	\$513,320

TRAINING & IMPLEMENTATION COSTS	Q2	Q3	Q4	TOTAL
Instructor's Guide- 500 copies	\$12,500	\$12,500	\$12,500	\$37,500
Learner's Guide- 500 copies	\$14,250	\$14,250	\$14,250	\$42,750
Building Rent - Arlington, VA	\$136,000	\$136,000	\$136,000	\$408,000
High Speed T1 Data Link	\$4,500	\$4,500	\$4,500	\$13,500
Utilities- electric, gas, voice communication	\$3,400	\$3,400	\$3,400	\$10,200
Hardware - PC & Mac	\$27,000	\$0	\$0	\$27,000
Gaming Equipment- Xbox, PS3, Nintendo	\$7,835	\$0	\$0	\$7,835
Mobile Devices- iOS, Android, Windows	\$1,465	\$0	\$0	\$1,465
Travel Expenses	\$7,500	\$7,500	\$12,500	\$27,500
Office Supplies	\$1,200	\$1,200	\$1,200	\$3,600
TOTAL TRAINING & IMPLEMENTATION COSTS	\$215,650	\$179,350	\$184,350	\$579,350
TOTAL BUDGET				\$1,092,670