

Senior Project Capstone Course

Course Syllabus and Guide

COURSE IDENTIFICATION

Course: Senior Project Capstone Course (CS /IT /IS)

Instructor: Osama Eljabiri

Office: Room 2315A- ITC Building -Seconds Floor

Office Hours: Wednesday 3:30-5:30 PM

Walk-ins are welcome any time based on availability

Online and in-class help hours are also available (see below)

Class-based extended office hours: 15-30 Minutes before most classes and up to one hour after most night classes (when necessary).

Live office hours: Online assistance and orientation are available (whenever possible)

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Website: <http://www.eljabiri.com> (has most up - to - date information)

Class Time: Sections 001 for all CS/IS/IT Students à Tuesday 4-5:30PM

Sections 101 for all CS/IS/IT Students à Tuesday 6-9 PM

Sections 103 for all CS/IS/IT Students à Wednesday 6-9PM

Class Location: Sections 001 for all CS/IS/IT Students à GITC 1100

Sections 101 for all CS/IS/IT Students à GITC 1400

Sections 103 for all CS/IS/IT Students à GITC 1400

Virtual Classroom System: <http://webct.njit.edu>

Course Description :

This is a team oriented project course. The instructor will offer or solicit a selection of projects. During the early part of the semester, students choose one of the proposed projects to implement; form teams as determined by the instructor, devise a plan for solving the project problem, and formally present their proposal to the class. Subsequently, each team implements its plan, periodically reporting to the class to present the progress of their work and solicit advice on problems in implementation. At the end of the semester, each team formally presents its results.

Course Objectives:

The Senior Project is intended to be a capstone experience for the senior Computer Science Majors (CS/IS/IT). The Senior Project involves the definition, design, computer implementation, documentation and presentation of a real world business problem of interest. Programming language implementation, database design, simulation, network programming, expert systems, programming tools and computer graphics are some of the topics or courses that students have selected for their projects in the past. Other interdisciplinary non-technical courses are also part of the student background. The senior project is a serious opportunity to put all these things together in a team work environment.

The student who has completed this course will have gained:

- q Experience in developing relatively large software project.
- q An understanding of what is involved in doing original research.
- q Increased programming and CASE tools skills.
- q Experience in documenting a major piece of software.

- q Experience in making oral presentations.

By the end of the course the student will have:

- Worked in a team of five to six students to solve a business problem in an existing organization through a well-engineered software solution.
- Developed a project plan, presented the plan to management and received approval for executing the project from both the instructor and the sponsor.
- Met with customer personnel, interviewed stakeholders, gathered requirements and documented the existing business processes..
- Developed a software solution for the business problem, and completed the project along with the accompanying documentation.
- Maintained an organized an individual and a group notebooks on the project with all necessary documentation.
- Provided all materials and documentation at project completion to your instructor and the client site as agreed upon during the project initiation phase.
- Prepared and delivered a formal presentation to classmates, business customers, and perhaps some selected faculty and other interested students. This final presentation will have covered the scope and objectives of the project, the nature of the business, and the solution that was suggested, implemented, tested, evaluated and installed.

Course Tools

The following software packages may be used/utilized in this course:

- Microsoft Visio (Standard, professional or enterprise edition), or Smart Draw 5 standard <http://www.smartdraw.com> – Modeling tool
- **Microsoft Project 2003 for windows (automate Gannt/Pert Chart generation)**
- SPSS – Statistical Package (Advanced students who choose to do research papers)
- Microsoft Word 2003 or above - document preparation
- Microsoft Excel 2003 or above – Spread sheet
- Microsoft PowerPoint 2003 - presentation software
- Windows XP - operating system
- Adobe Acrobat Reader 4.0/5.0 - used to read .PDF documents (available on the WWW)

Other optional software includes:

- SilverRun– DFD diagrammer <http://www.silverrun.com>
- Oracle Designer/Developer 2000
- Microsoft Access
- Implementation CASE tools

The Importance of Online Participation:

Although this is a live class and attendance is extremely important, the online part of this course will be conducted via the **Webct conference system**. It is therefore vital that students enrolled in this course have access to the World Wide Web and to electronic mail. The WEBCT Online conference system is the basic system that will be used this semester to submit assignments, introduce student to class, track grades, communicate with group and instructor and get updates about class work or any other official announcements.

Online enrollment and participation **via WEBCT** is MANDATORY and it is an important part of the overall student evaluation. **It is due the first day of class** . You are added by default since I establish class

webct boards weeks before semester starts .You just need your university ID and password to access .*If you registered in the course lately , you should contact(EMAIL) the webct admin to add you ASAP.* With online participation, the learning process can be enhanced dramatically and will go beyond limited and traditional time available in live classes. Students are always encouraged to start or participate in the WEBCT discussion boards. You can always check and track your grades and performance via WEBCT system throughout the semester.

The Generic Development Process

Even though the development process varies depending on the nature and the scope of each project, the development process -in this class- should essentially follow two iterations of an iterative lifecycle model. Hence, **after project initiation and planning**, this process has to encompass the following phases:

Phase No	Phase Name	Phase Description
1	Primary Requirements gathering	The student team interacts with stakeholders to gather requirements for the software that they are to develop.
2	High-level System Architecture	The project team develops a rapid, high-level design for the system. This design serves as a blueprint for initial prototyping and involves only very little technical details.
3	Revolutionary Prototyping	The project team constructs an exploratory prototype of the software product to enhance requirements understanding, determine appropriate design strategies, acquire necessary IT tools (i.e.: hardware, software, networking, etc.) and become familiar with the development environment. Protocol analysis or surveys may be involved to extract quality definition for requirements. This prototype should evolve in a new release with every presentation.
4	Formal Requirements	The project teams revisits requirements and develop a more detailed and well-modeled requirements specification.
5	Detailed Design	The project team develops a comprehensive well-specified design for the software they are to develop from system structure to modular decomposition.
6	Implementation	The project team carries out a full-scale development of the system. This encompasses module and systems level testing, development of a test and quality assurance plan, and the delivery of a beta version of the system to the project sponsor.
7	Documentation	The project team will generate a set of customer documentation adequate for the particular project and stakeholders expectations. - Full software engineering documentation of the entire software development process (including all artifacts and

		deliverables) - A user reference manual (A user -oriented definition of the system) -A user tutorial manual (an simple guide to provide sufficient help and guidance for beginners) - A developer manual (an overview of the implementation for programmers who will maintain the software). -Online help system (varies depending on the nature and the scope of the system)
8	Final project Presentation (After 4 quick presentations throughout the semester)	A 20-minutes presentation and demonstration of the entire development process and the software product.
9	Release	Once all software code is developed , tested , validated and verified and all documentation is finished , the project is released to the sponsor. The release package contains the software and all necessary documentation.

A new version of the capstone experience

Starting from Fall 2005, we will unleash a new version of the capstone course experience that is more adaptive , more team-intensive and more speedy . This version is a response to our evolutionary capstone experience in real world projects in which change management , effective collaboration and agility have been dominant factors in influencing team performance and problem solving quality . Our approach benefits tremendously from agile software development strategies with more emphasis on Scrum and FDD (feature-driven development) as key models .

Timeline

As a result and based on the fact that the deadline for forming all teams and selecting all projects will be Monday 19th , 2005 , the following is an illustration of how all projects will progress :

1- Each team will have to finish their project within a series of (5) sprints (or iterations) where each sprint is two-week long as follows .

- a. Sprint (1) starts on Monday Sep 26th and concludes on Monday Oct 10th . The deliverables should be presented to the client during that week . A presentation to the class is also required on Tuesday Oct 11th or Wednesday Oct 12th depending on your section time
- b. Sprint (2) starts on Monday Oct 10th and concludes on Monday Oct 24th .The deliverables should be presented to the client during that week. A presentation to the class is also required on Tuesday Oct 25th or Wednesday Oct 26th depending on your section time
- c. Sprint (3) starts on Monday October 24th and concludes on Monday Nov 7th . The deliverables should be presented to the client during that week. No presentation is required to the class for this sprint
- d. Sprint (4) starts on Monday Nov 7th and concludes on Monday Nov 21st . The deliverables should be presented to the client during that week. No presentation is required to the class for this sprint.

e. Sprint (5) [FINAL ONE] starts on Monday Nov 21st and concludes on Monday Dec 5th . The deliverables should be presented to both the client and the class in the classroom . Depending whether you are in a Tuesday or Wednesday capstone section , your FINAL PRESENTATION will be either on Tuesday Dec 6th or Wednesday Dec 7th .

- 2- Development teams meet with the client, or product owner, before each sprint to prioritize the work to be done and select the tasks the team can complete in the upcoming sprint.
- 3- During each sprint, the ideal situation is that the team stays on track by holding brief 30-minute daily meetings possible . If that was difficult, the team should have at least three brief 45-minute meetings each week.
- 4- At the end of each sprint, the team delivers a potentially shippable product increment.

Key Deliverables

The FDD methodology mandates five phases :

- 1- Develop an Overall Model
- 2- Build a Features List
- 3- Plan by Feature
- 4- Design by Feature
- 5- Build by Feature

Project Ideas

In this course, “student teams” complete a substantial “real world” project that tackles a business problem. This business problem can be a:

- 1- An idea suggested by instructor in which students have to search for a matching case, contact potential stakeholders, get approval, and develop a complete software solution to the business problem. The instructor solicits good project proposals each semester before classes begin. Proposals are brief descriptions of ideas for projects provided by industry, faculty or other resources. Once classes start, these proposals are given to the students, who then form teams, select projects, and begin their development.
- 2- A case provided by sponsors drawn from both industry and research organizations. These projects are developed under the direction of the course instructor and members of the sponsoring organization.
- 3- A continuation of a good CIS490 (or CIS390) project that has been properly analyzed and documented. This option is subject to instructor’s approval. The instructor will exclude repetitive project ideas that add no value, unsubstantial projects, unrealistic projects, or poorly documented projects.
- 4- An idea suggested by a faculty member(s). Such ideas may require faculty member involvement, assistance or advisement. However, faculty can also suggest the idea and leave it to the course instructor to make further enhancements and adapt it to the senior project level.
- 5- A good idea suggested by students themselves (entrepreneurship track) in which they can bring their own sponsor or suggest a potential one .In either situations, students have to follow the same life cycle in developing their project and providing the final software solution.

Team Formation

The following process will be followed to form project teams in the senior project class:

1. Creating project ideas inventory : Every project will have a special reference code

2. Announcing job opportunities: Every project will create 5-6 job opportunities. Every job will have a reference code. Every job will have a job description and required qualifications.
3. Applying for and Assigning project managers (decision will be made by instructor). PM's should have an "A" in CIS490 or CIS390 (where applicable), a competitive GPA, interdisciplinary background, leadership skills, team spirit and ability to create synergy and cohesiveness among team members. Project management experience and/or background is definitely a plus.
4. Applying for and assigning project team members (decision will be made by project coordinators under instructor's supervision)
5. Declaring project teams, project titles, project abstracts and team structure formally.
 - a. Hard copy form with signatures
 - b. Online declaration
 - c. Establishing private discussion webct boards for groups
 - d. Establishing a work calendar and a meeting schedule
 - e. Weekly status Reports

Team Composition

Teams should reflect multidisciplinary skills in their composition to handle task diversity in an appropriate manner. These skills should match job responsibilities and tasks to be carried out. These skills vary widely depending on the nature, the scope and the size of the project. However, the most typical specialties in each team should encompass the following categories (or equivalent to them) :

Position Code	Position		Job Description/responsibilities	Qualifications
01	Project manager		In addition to managing the team, project managers will be responsible for project management deliverables including feasibility study. He should use project management tool (Microsoft Project Manager) to plan project tasks, allocate and manage resources, assign team members to complete tasks, compile team members' weekly time sheets, report task completion and actual hours worked on tasks, prepare periodic reports on project progress. Receives extra credit when successful.	In addition to the criteria stated in the previous section, background in software economics, process life cycle models and project management techniques is essential.
02	System Analyst		System analysts will be responsible for requirements gathering and documentation (Problem definition, requirements report, DFD's, process specifications, data dictionary , etc) and coordinating with other team members.	Experience/ background in requirements analysis, requirements elicitation techniques, and project documentation.
03	Back-end designer	0301 Data Base Designer	Responsible for designing the backend of the system including data structures, entity relation ship models normalization, SQL,	Experience/ background in DBMS, CASE tools and modeling

		0302 Network Designer	normalization, system structure and other architectural models (repository , client-server, abstract machine model , object-oriented design in UML ,etc.)	techniques in software engineering.
04	Front-end designer		Responsible for designing the user interface for users (including GUI components , forms , reports , navigation , etc.	Experience/ background in HCI , cognitive psychology , user interface design, user manuals
05	Programmer		Implementing the system at the unit level and system level. Testing and Maintaining the system Writing user manual .	Experience in web programming and other programming such as C++ , Visual Basic , Java, and the like)

Team Rules:

Group work required for the team project. One copy of all project deliverables will be passed in. Provide the names of all group members on the title page. Group work will be graded as one, and each team member will receive the given grade.

- q All team members may participate in the work of the project as well.
- q One team member -- probably project manager -- should be responsible for handling all communication between the team, the customer and course director.
- q **Free riding will NOT be tolerated in this senior project class. Do not be a free rider. Teams may divorce free riders through due process (documentation and a warning). If your team divorces you, you will receive a grade of "F".**
- q Do not enable free riders. Require every person on your team to work. Do NOT do ALL the project work when others fail to deliver. Peer pressure is a VERY STRONG motivator.
- q Don't wait for someone to assign you a task -- volunteer to do whatever you can do on the project.
- q The successful completion of the project depends on the work of every member throughout the entire project.

MEMBER FIRINGG POLICY – “As a group, you have the right to fire any member that is not contributing to your project. The policy helps enforce group work and gives you an alternative to a problem member. If you fire a team member, you must write me a memorandum ASAP. Please don't write it very late in the course. At this point, the team member must join another group (if allowed) or develop their own project. If the group member fails to join another group or develop their own project, THE MEMBER WILL GET NO POINTS IN THE PROJECT. NO EXCEPTIONS!!

Within the first month (of the semester): The team can fire the team member and the member will be asked to join another group or to do an entire project on his own.

Within the second month (of the semester): If free riding exists or continues, free riders are highly recommended to drop a course they are not able or they don't wish to put sufficient efforts in.

After the second month (of the semester): Free riders will continue with the team but the team "project manager" will decide what percentage of their duties and responsibilities was actually accomplished in comparison with other team members. Accordingly, course instructor will give the member who has lack of participation a grade that reflects this percentage. For example, if the member's

work versus team members' work was 10% and the group achieved 90% in the final evaluation, this team member actual grade will be 9% (this is 10% x 90%).

Implementation Tools

Generally speaking, the project team is allowed to choose any implementation language; environment or tools that fit their project needs and match their capabilities. **However, if the sponsor has specific instructions in this regard, the team has to comply with these instructions, convince the sponsor with a different approach or totally switch to a different project idea.** The team can combine a number of languages and tools such as Java, Java script, html, xml, Visual Basic, Access, C++, CASE tools and the like in one project. **Full Software copy of samples of the working source code is required in the final submission. Final presentation should include front-end full demo, database structure and an explanation of various samples of data structure and source code.**

Options include:

- 1- Programming languages (C++, java, visual basic, etc.)
- 2- DBMS packages (Access, Oracle, etc.)
- 3- CASE tools (upper, lower, or total)

Deliverables /Artifacts :

Total = 2 major reports, 3 key presentations, 5 progress reports and full software implementation. Please review the following details very carefully since they are crucial for your evaluation

- **2 Documentation Reports:** Your Midterm Documentation report should include project deliverables items from **Sprint 1 & 2. This should be on your clearly labeled CD** (No hard copies any more). Your final report Documentation report should include project deliverables items from **all five sprints**.
- **3 Presentations:** **Presentations are in parallel with documentation reports and evolutionary prototyping.** A max of "10-minute" presentation that requires equal participation of all team members and coverage of both the process and the product (i.e.: Documentation and Implementation so far). Please include your PPT presentation on the same CD. Extra credits will be given for innovation, sponsor attendance, professionally looking teams, etc.
- **5 Progress Reports:** **Project managers should** report team status and project progress (after each sprint). **These reports should be submitted online as instructed on capstone course website.** Failure to turn in progress (status) reports on time will result in no points in PM evaluation for each missed progress report.

Final Individual File :

*Individual team members are required to document their time and effort weekly in a format acceptable to the Project manager. Team members must also maintain a weekly diary that can be used by the Project manager to create the team's status (progress) report. Students are expected to write a minimum of 50 words per weekly diary entry. **Online submissions via webct are the acceptable channel of the internal submissions within the private group discussion board (to be created by instructor).***

Final individual file is required from each team member. It has to be submitted as part of the final project documentation. It should clearly answer the following questions :

1. What were the tasks you were responsible for (Individual plan)?
2. When where these tasks carried out?
(Please indicate that on a personal copy of the project Gantt chart)
3. Write a weekly diary of your project experience and /or participation
(50 words minimum per week)
4. Provide a one-page brief summary of your overall role and individual project contribution

All individual reports for each team should be on one CD to be submitted with FINAL PROJECT DOCUMENTATION. Every team member has to prepare his individual report by him/her self.

Project managers are recommended to show their “project manager folders “ with every presentation. This folder has to be well organized, comprehensive and really helpful for the PM and his team in the development process. Project manger folder is a substitute for individual files requirement ONLY for project managers.

Other Requirements:

All types of project documentation (including progress reports) must include the following information:

- a. Prepared By: (student names who prepared or created the document)
- b. Reviewed By: (student name who reviewed document)
- c. Creation Date
- d. Last Update Date (if it is an updated version)

Sponsor Evaluation Form :

This form must be received before grades are due. This form must be received before grades are due. No team member will receive a grade without a correctly completed Project Sponsor evaluation form. It is a crucial part of team and individual evaluation alike (200 points minimum) .
(Only one Project Sponsor evaluation form should be filled out for each team)

Team Instructions:

The project manager has to send out the non-evaluative portions of this form (group info , team member names, etc.) to the sponsor. ONLY online submission is accepted and should be completed directly by the sponsor

No team member will receive a grade without a correctly completed Project Sponsor Evaluation Form. It is a crucial part of team and individual evaluation alike **(200 points minimum)**. **Please read and apply instructions for sponsor evaluation form accurately.**

Customer Meetings:

In order to gain a better understanding the organizational culture and the operating environment at the customer site, it is critical to establish a solid working relationship with your client. Students are expected to work onsite on a regular basis. Project teams should establish a timetable with the customer / sponsor for being onsite.

Weekly class Meetings (Attendance) :

Weekly class meetings with your instructor are required to review project reports and project deliverables.

Failure to attend a meeting will result in a 2%-percentage (20 points) reduction for your overall individual grade. Starting from Sprint 1 , each PM is required to "report" their team's status report for the week online via appropriate online form . Project managers are required to bring or ask team members to bring all project materials every class meeting. It is strongly recommended that students make backup copies regularly of all project materials. Clearly, failure to backup your work could have catastrophic consequences. Also , remember that when you submit any thing to your instructor , it becomes college property. You should always make your own copies in advance.

COURSE POLICIES

1. CHEATING POLICY

PROJECTS/CASES – “You must do your own work on all projects/cases. You may discuss your project with other students and instructors and get advice, however, the actual assignment must be done by YOU! If you submit as your own work, any work done by a previous CIS491 student, you have cheated. If you submit as your own work, any work done by another person, you have cheated. If you have any doubt, ask your instructor BEFORE you submit the work as your own. After you submit the work, it is too late to ask!”

CONSEQUENCES – “There will be no second chances. If you are caught cheating, you will receive an "F" for the course”

2. **INCOMPLETE GRADES** – “Incomplete grades will not be given unless there are extraordinary circumstances as deemed by the instructor.”
3. **ATTENDANCE** – “**You are expected to be in class for every class session and to be on time. Deductions will be applied (2% for each absence) unless justified with a very convincing reason (notification should be in advance with proper documentation)** .Not attending class robs you of the opportunity to ask questions, get information about assignments, and generally helping you acquire the knowledge you need to pass this class. **Arriving late disturbs the class in progress and is simply rude. While it is understood that circumstances may sometimes interfere, please make a point of being in class and being on time.**

Senior Project Capstone Course (all sections CS/IS/IT)

Fall 2005 Schedule

<i>Date</i>	<i>Topic</i>	<i>What to do?</i>	<i>What to submit?</i>	<i>What to Present?</i>
Week 1 9/6/ 05 9/7/05	1-- Course Introduction 2-- Project Database 3- SCRUM / FDD process	-Browse ideas -Add ideas -Apply for PM	Professional WEBCT Introduction (Due Friday Sep 9th Midnight)	None
Week 2 9/13/ 05 9/14/05	1- Sponsors Presentations 2- Team Composition progresses	- Select a project or team -Apply for a job code in a team	-Apply for a group position - Reserve a project idea (only PM)	None
Week 3 9/20/ 05 9/21/05	1- Finalizing Teams 2- Project Management Discussion	Participate in discussion	None	None
Week 4 9/27/ 05 9/28/05	Requirements Engineering Discussion	Sprint (1) starts Participate in discussion	None	None
Week 5 10/4/ 05 10/5/05	Software Architecture Discussion	Participate in discussion	None	None
Week 6 10/11/ 05 10/12/05	First Sprint Presentation	Submit deliverables / present them With Prototype 1 Sprint (2) starts	Please see project deliverables in the next table	First Presentation (10 M)
Week 7 10/18/ 05 10/19/05	Presentation Skills	Participate in discussion		
Week 8 10/25 05 10/26//05	Second Sprint Presentation	Submit deliverables and present them With Prototype 2 Sprint (3) starts	Please see project deliverables in the next table	Second Presentation (10 M)
Week 9 11//1/ 05 11/ 2/05	Project work in-team , No regular classes	Participate , contribute ,and revise		
Week 10 11/8/ 05 11/ 9/05	Project work in-team , No regular classes	Participate , contribute ,and revise Sprint (4) starts		
Week 11 11/15/ 05 11/ 16 /05	Project work in-team , No regular classes	Participate , contribute ,and revise		None
Week 12 11/ 22/ 05 11/ 23 /05	Project work in-team, No regular classes	Participate , contribute ,and revise Sprint (5) starts		None
Week 13 11/ 29/ 05 11/ 30 /05	Project work in-team, No regular classes	Participate, contribute, and revise		None
Week 14 12 / 6 / 05 12 / 7 /05	Final Presentation	Submit deliverables and present them With Final Software Release	-Full documentation -Software Product All on one CD	Final Project Presentation (15 minutes)

GRADING POLICIES

Your final grade in this course will be based on the percentage of points that you receive out of the total possible points for the course (1100). Grades will be determined according to the following scale:

90% - 100%	A
85%- 89%	B+
80% - 84%	B
75%- 79%	C+
70% - 74%	C
60% - 69%	D
0% - 59%	F

Evaluation Criteria

The Evaluation Criteria for this course will be as follows :

1. Final project Report CD (150 points)
2. Midterm Project Report CD by the second Sprint presentation [includes sprint 1 & 2] (70 points)
3. Progress reports (100 points)
4. Introduce yourself assignment (on-time) (30 points)
5. Project Final Individual Assessment (100 points)
6. Sponsor evaluation form (250 points)
7. Class attendance [Total 100 points] but deductions may exceed 100 if very poor attendance occurred.

[INCLUDING (-20 POINTS for every class you missed without a documented permission, -50 points for missing last class)]
8. Class/Online participation (50 points)
9. All thee presentations (including 60 points for Final presentation) (150 points)

Sponsor evaluation form , final deliverables/presentations , final progress reports , final short exam and attendance are CRUCIAL VARIABLES that can give extra push UP/DOWN.

However , you will also notice on WEBCT plenty of extra credit opportunities as well (including project implementation or coding , project assessment extra credits , on-time video reviews extra credits , class participation extra credits , etc.).Some times your extra credits will be included in your original grade if the grade was above the highest score.

Free riders DO NOT QUALIFY for GROUP GRADES .Their grades will be based on their percentage of contributions according to deliverables ,PM progress reports and sponsor evaluation forms .If a student has very low or no participation in-project , in-team and in-class , he /she may not get a passing grade.

Please note that:

- Class attendance, and in-Class /online participation and collaboration is very important
- In-group participation and attendance is extremely significant in determining your final letter grade.

Good Luck,
Osama Eljabiri

Supplement : Project Deliverables and Timeline through the five sprints

Sprint number	Starting Date	Ending Date	Client Presentation	Class Presentation	FDD Phase	Deliverables	Key Roles
Sprint 1 <i>(2 weeks)</i>	Sep 26 th	Oct 10 th	Required	- Oct 11 th - Oct 12 th <i>Present and deliver Sprint 1 in class</i> <i>Progress report required</i>	-Entry criteria -Overall Model -Feature List -verification -exist criteria	- Requirements analysis document - features list - Class Diagram - Sequence Diagram -Compliance with entry/exit criteria	-Project manager -Chief Architect -Modeling Team - Features list team -Chief Prog. -Domain Expert
Sprint 2 <i>(2 weeks)</i>	Oct 10 th	Oct 24 th	Required	- Oct 25 th - Oct 26 th <i>Present and deliver Sprint 2 in class</i> <i>Progress report required</i>	-Entry criteria -Plan by Feature -Design by Feature -Build by Feature -verification -exist criteria	First features set : -Plan document -Design document - Features set prototype -Compliance with entry/exit criteria	-Project manager -Chief Architect - Chief Prog. - Features sub-groups
Sprint 3 <i>(2 weeks)</i>	Oct 24 th	Nov 7 th	Required	No class presentation or deliverables required <i>Progress report required</i>	-Entry criteria -Plan by Feature -Design by Feature -Build by Feature -verification -exist criteria	Second features set : -Plan document -Design document - Features set prototype -Compliance with entry/exit criteria	-Project manager -Chief Architect - Chief Prog. - Features sub-groups
Sprint 4 <i>(2 weeks)</i>	Nov 7 th	Nov 21 st	Required	No class presentation or deliverables required <i>Progress report required</i>	-Entry criteria -Plan by Feature -Design by Feature -Build by Feature -verification -exist criteria	Third features set : -Plan document -Design document - Features set prototype -Compliance with entry/exit criteria	-Project manager -Chief Architect - Chief Prog. - Features sub-groups
Sprint 5 <i>(2 weeks)</i>	Nov 21 st	Dec 5 th	Combined with class presentation	- Dec 6 th - Dec 7 th <i>Present and deliver all sprints from 1-5 in class</i> <i>Final Progress report required</i>	-Entry criteria -Plan by Feature -Design by Feature -Build by Feature -verification -exist criteria	Forth and combined features sets : -Plan document -Design document - Features set prototype -Compliance with entry/exit criteria	-Project manager -Chief Architect - Chief Prog. - Features sub-groups