RUP Vision Document for
The “BSinCS” Game:
Defining Overview, Stakeholders, Goals and Components

Technical Project CSCE 543

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BSinCS Vision

Version 1

ReVision document History

Date	Version	Description	Author
15/09/15	1.0	Preliminary version of the BSinCS game	Gagandeep Bansal , Gaurav Palande

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Vision

1. Introduction

1.1 Purpose

The purpose of this document is to collect, analyze, and define high-level needs and features of "BSinCS", an academic driven computer role playing game set. It focuses on the capabilities needed by the stakeholders, and the target users, and why these needs exist. The details of how BSinCS fulfils these needs are detailed in the use-case and supplementary specifications

1.2 Scope

This Vision Document applies to the BSinCS game, which will be developed by the Team Dynamos, students of CECS. Team Dynamos will develop this Windows based application to serve as a game. BSinCS is an academic driven computer role playing game set which will be played in CSULB's campus premises. The objective is to create a rich experience that help student to complete his bachelor's with fun. BSinCS will be a multi-player game. You'll play a single, specific character, with multiple players that are AI.It will be an entertaining game.

1.3 Definitions, Acronyms and Abbreviations

Abbreviations:

CECS	Computer Engineering and Computer Science
BSinCS	Bachelor of Science in Computer Science
BS	Bachelor of Science
CSULB	California State University Long Beach
AI	Artificial Intelligence
QP	Quality Points

1.4 References

Applicable references are:

- Lectures notes by the Professor Michael Hoffman

  https://bbcsulb.desire2learn.com/d2l/le/content/308384/Home

- University website

  www.csulb.edu

1.5 Overview

The vision document illustrates the problem with the current entertainment aspect of the education system and proposes a solution. It also describes the stakeholders and the users, along with their environments, associated with the proposed solution. The document gives an overview of the product with respect to the features, standards, requirements and supporting documentation.

2. Positioning

2.1 Business Opportunity

Simulating the experience of the BS student in CSCE department of CSULB can be an important aspect for promoting CSULB as an education destination for computer eduction. This involves immersing the user, in this case the gamer, in an environment which familiarises him with the various courses available for BS within CSCE. In addition, the game will act as an entertainment medium for existing students and faculty within CSCE. The user can define the sequences of courses undertaken to achieve the BS degree during the game. This game is designed to be installed on the users computer. A possibility that the game be embedded on CSULB's CECE website can also be envisioned.

2.2 Problem Statement

The problem of	lack in variety in the current education related promotional as well as entertainment mediums within CSULB
affects	current and prospective BS students as well as faculty
the impact of which is	current and prospective students losing interest in pursuing the BS degree with CSULB
a successful solution would	a simple, easy to comprehend, graphical, entertaining, role playing game. The product simulates the experience of the BS student in CSCE department of CSULB. This involves immersing the user in an environment which familiarises him with the various courses available for BS within CSCE thus generating interest in the departments coursework.

2.3 Product Position Statement

For	Current and prospective BS students as well as faculty
Who	Feel the need for an educational cum entertainment medium that promotes the experience of obtaining a BS degree through CSULB
The BSinCS game	is a windows based role playing game
That	Provides human players, as a student, the ability to play against two computer AI's (simulating opponents) in a race to gain Quality Points toward graduation.
Unlike	current available promotional mediums in CSULB that do not promote the educational experience for obtaining a BS degree in an entertaining format.
Our product	follows the player through the four years of undergraduate study that culminates with you earning a BS in CS. You begin as Freshmen. There is one human player and two AI players The students move around the game board and play Game Cards, which often present some type of challenge to the student and offer some reward for passing. The rewards take two forms: Quality Points , which move you along to graduation or the next grade. The game also includes Skill Chips which increases the player's skill in three areas: Learning, Craft and Integrity. These three skills are what allow a player to complete a challenge

	presented in the game cards.

3. Stakeholder and User Descriptions

3.1 Market Demographics

The target market segment includes CSULB's current and prospective students as well as faculty whose major or area of interest is CS. The users are anticipated to be consumers who already use computer or laptops on regular basis for personal ,educational and/or business use. The game will be assessed for valuation in the near future and and if integrated with future CSULB CSCE promotional campaigns, can generate income through increased enrollment.

3.2 Stakeholder Summary

Name	Represents	Role
Product Owner	This is a stakeholder who has requested for the proposed system and will benefit from its implementation	Major source for information regarding the environment in which the proposed system is to be implemented. Provides information regarding factors that may affect the systems integration in the system.
System Analyst	This is a stakeholder that works with the stakeholders to gather their needs.	Leads and coordinates requirements elicitation and use-case modeling by outlining the system's functionality and delimiting the system; for example, identifying what actors exist and what use cases they will require when interacting with the system.
Requirements Specifier	This is a stakeholder that works with the Analysts to correctly translate requests/needs into requirements to be used for design	Specifies the details of one or more a parts of the system's functionality by describing one or the aspects of the requirements, this will include functional and non-functional.
Technical Reviewer	This is a stakeholder that must be involved regularly to maintain the development cycle.	Responsible for contributing feedback to the review process. This role is involved in the category of review that deals with the technical review of project artifacts. This role is responsible for providing timely, appropriate feedback on the project artifacts being reviewed.
Software Architect	This is a stakeholder that is primary for leading the system	Responsible for the software architecture, which includes the key technical decisions that

	development.	constrain the overall design and implementation for the project.
Project Manager	This is a stakeholder that is primary for leading the system development.	Plans, manages and allocates resources, shapes priorities, coordinates interactions with customers and users, and keeps the project team focused. Also establishes a set of practices that ensure the integrity and quality of project artifacts.
Market Analyst	This is a stakeholder that will assist our abilities to position our product successfully.	Ensures that there is going to be a market demand for the product's features and for the new service.
Software developer	This is a stakeholder that will develop the desired system as per the requirement	Implements, deploys and/or maintains the proposed system as per the product owner's requirements.

3.3 User Summary

Name	Description	Stakeholder
Player	Primary end user playing against two AIs in the game in a race toward completing graduation.	Self
AI	End user playing against the player in the game in a race toward completing graduation.	Self

3.4 User Environment

Initially the game will be developed as a standalone application for Windows operating system but in nearest future it will be developed for other operating system's like Mac OS and Linux. The user has to run the game on Windows operating system and start playing.

The player will play against two AI players and they will remain till end of the game. The students move around the game board and play Game Cards. The game ends with any player completing his/her graduation. This game will be played indoors as well as outdoor locations.

3.5 Stakeholder Profiles

3.5.1 Professor. Michael Hoffman

Representative	Product Owner, Requirement Specifier, Technical Reviewer
Description	Has requested for the proposed system and will benefit from its implementation. Will work with the Analysts to correctly translate requests/needs into requirements to be used for design. Is involved regularly to maintain the development cycle.
Type	Expert

Responsibilities	Major source for information regarding the environment in which the proposed system is to be implemented. Provides information regarding factors that may affect the systems integration in the system. Specifies the details of one or more a parts of the system's functionality by describing one or the aspects of the requirements, this will include functional and non-functional. Contributing feedback to the review process. This role is involved in the category of review that deals with the technical review of project artifacts. This role is responsible for providing timely, appropriate
Success Criteria	The success is completely defined by the completion of our system according to the given specification.
Involvement	Provide specification and Review the development to help evaluate our design.
Deliverables	Vision Document, Design document, Iterative working prototype of the solution till the desired solution is achieved.
Comments / Issues	

3.5.2 Gaurav Palande and Gagandeep Bansal

Representative	System Analyst, Software Architect, Project Manager, Software developer
Description	Works with the stakeholders to gather their needs. Primary for leading the system development. Develop the desired system as per the requirement
Type	Adept Software Developer
Responsibilities	Leads and coordinates requirements elicitation and use-case modeling by outlining the system's functionality and delimiting the system; for example, identifying what actors exist and what use cases they will require when interacting with the system. Responsible for the software architecture, which includes the key technical decisions that constrain the overall design and implementation for the project.Ensures that the system is going to be maintainable and the architectural solution supports the functional and non-requirements. Plans, manages and allocates resources, shapes priorities, coordinates interactions with customers and users, and keeps the project team focused. Also establishes a set of practices that ensure the integrity and quality of project artifacts. Implements, deploys and/or maintains the proposed system as per the product owner’s requirements.
Success Criteria	The success is completely defined by the completion of our system according to the given specification without any bugs or defects. The stakeholder will be graded for the successful completion of the project.
Involvement	The stakeholder is conducts analysis on the system, creates the solution architecture, ensures completion of the project by following a process model. Delivers the working system by implementing, deploying , testing and then maintaining the system.
Deliverables	Project requirement Document and Customer Feedback of reviews conducted.
Comments / Issues	

3.6 User Profiles

3.6.1 Player

Representative	End User
Description	The end users are typically educated, computer literate, and have access to the Internet. It is expected that each CS freshman will play this game.
Type	This is an casual user with experience in how to operate computer.
Responsibilities	The player needs to follow the game instructions and provide user input when requested.
Success Criteria	The success is completely defined by the ability of the user to play his moves. The first player to reach 100 QP wins the game
Involvement	The game being developed is for the student only so that he can complete his bachelor's with fun.
Deliverables	Game application, Game instruction manual
Comments / Issues	

3.7 Key Stakeholder / User Needs

Need	Priority	Concerns	Current Solution	Proposed Solutions
Fairness	High	Player should get fair chances in the game.	None	The turn-based functionality will enable fair game play
Involvement	High	The system should allow user input	None	The system waits for user input during the players turn
Variety in Game play	Moderate	The game play should give non consistent winners	None	The game uses randomized events during the course of game play
Definite purpose	High	The game should end with the winner achieving the said goal	None	The game ends when the winner completes his graduation
Easy to use	High	The game should be playable without too much complications	None	Provide user friendly, highly intuitive application regardless of any computer system.

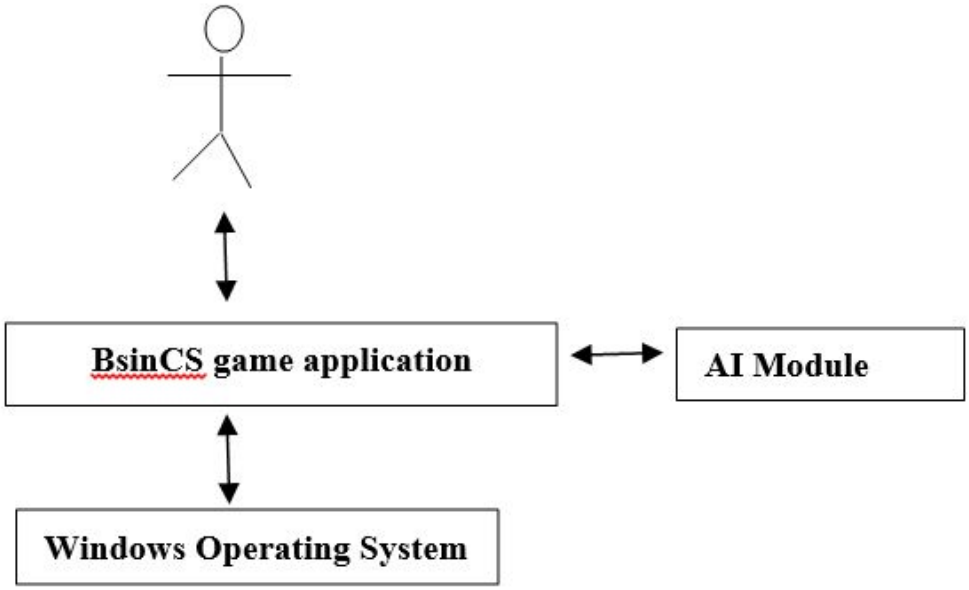
Responsive	Moderate to High	The game should be responsive to the user within acceptable time duration	None	The game will respond to the user input in real time

3.8 Alternatives and Competition

3.8.1 There will be other CS students that are developing similar kind of game so they will be giving competition to this game.

4. Product Overview

4.1 Product Perspective



The "BSinCS" is an academic driven computer role playing game set that van be played by CSULB's current and prospective students as well as faculty whose major or area of interest is CS.Team Dynamos is developing Window's version of the game.The user has to run the game on Windows operating system and start playing.

The player will play a single, specific character, with multiple players that are AI.The students move around the game board and play Game Cards, which often present some type of challenge to the student and offer some reward for passing.

4.2 Summary of Capabilities

The table in this section identifies the main capabilities of the Game in terms of benefits and features.

Customer Benefit	Supporting Features
Convenient, flexible access to the system	Local access

Student having difficulty in operating can play easily.	The game progresses with just click of mouse button.
Growth of interest in the CSCE graduation coursework	The inclusion of CSCE theme for the game

4.3 Assumptions and Dependencies

- The player will complete the game.
- The system used to play the game supports all features of the game
- The execution of game will depend upon the move made by the user and AI.

4.4 Cost and Pricing

It is anticipated that existing computers of the developers will be used as the target machines and that no hardware budget is required. However pricing of the product will be decided in near future

4.5 Licensing and Installation

- There are no licensing requirements for V1.0 of the game, as it will be available only to CSULB college students.
- Installation of the game must be available via diskette, CD.

5. Product Features

5.1 Start system

The student need to be able to start up and initialize the system locally.

5.2 Shutdown system

The student need to be able to shutdown the system gracefully locally.

5.3 Definite set of players

The Game has three set players and a human player

5.4 Game play

Student moves around the game board and play by selecting game cards**.**

5.5 Challenges

Cards offer some challenges as well as rewards for passing to the student.

5.6 Flexibility

Player has option to choose the room.

5.7 Goal for winner

First player to reach 100 Quality Points wins the game.