

MICHIGAN STATE

UNIVERSITY

Project Plan

Coverage Crisis: Covering Your Assets

The Capstone Experience

Team Auto-Owners

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*From Students...
...to Professionals*

Functional Specifications

- Insurance is often an intimidating subject and the opportunities to learn about it are limited.
- Video games are accessible and engaging tools for learning.
- Coverage Crisis: Covering Your Assets is an insurance-based RPG where the player uses insurance to protect them and their assets from randomly occurring events.
- Coverage Crisis uses point and click style controls and is web-based.



Design Specifications

- Single Player, role-playing game
 - Schooling and Career
 - Asset Management
 - Insurance Coverage
 - Dynamic Events
- Leaderboard – summary information
- Admin Tool – in depth information



Screen Mockup: Pay Day

Coverage Crisis

Player Name
Career
___ coins

Turn #1

Personal Exposures ▾

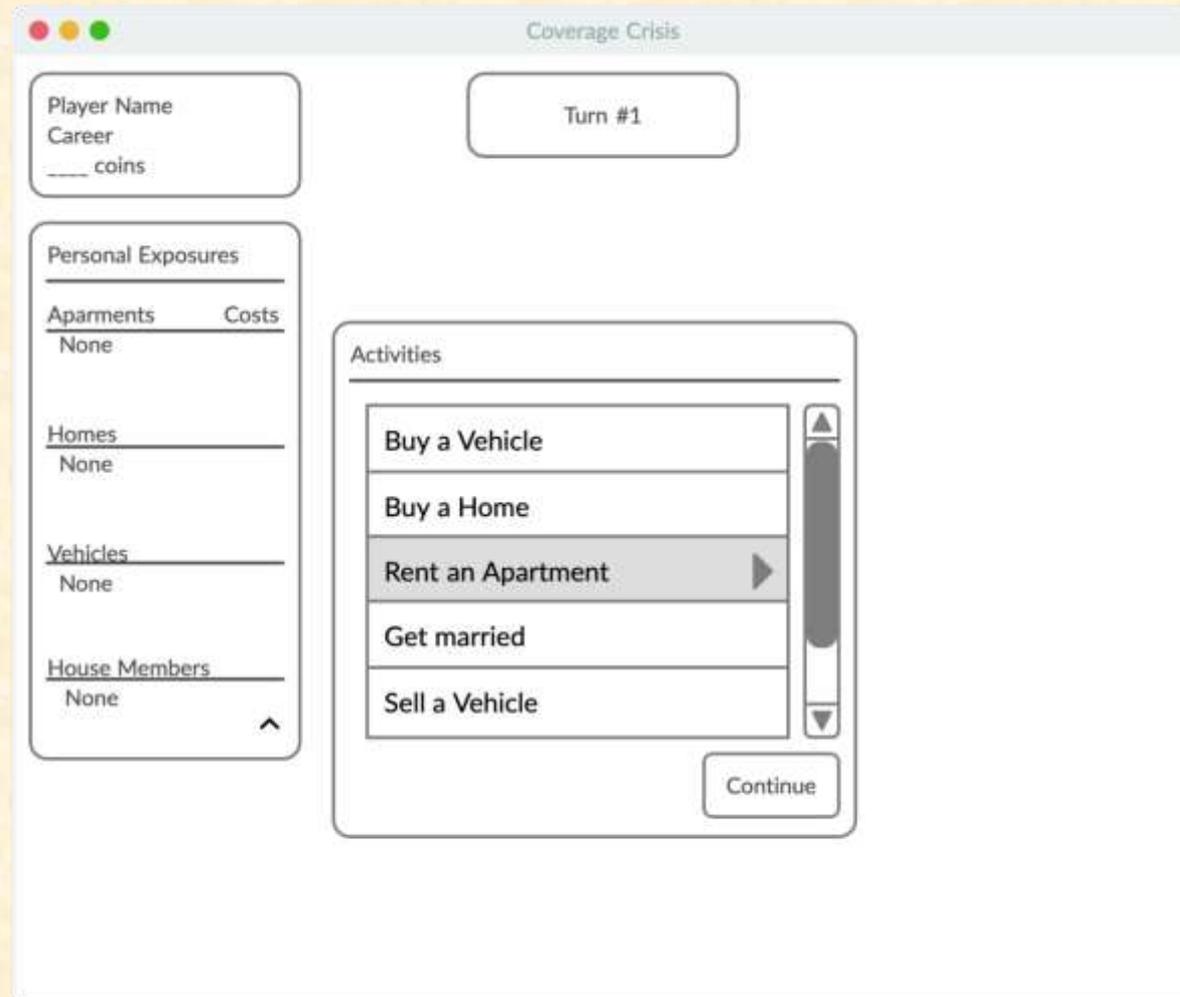
Pay Day

Salary	+ _____
Student Loans	- _____
Mortgage/Rent	- _____
Car Payments	- _____
Insurance Premiums	- _____

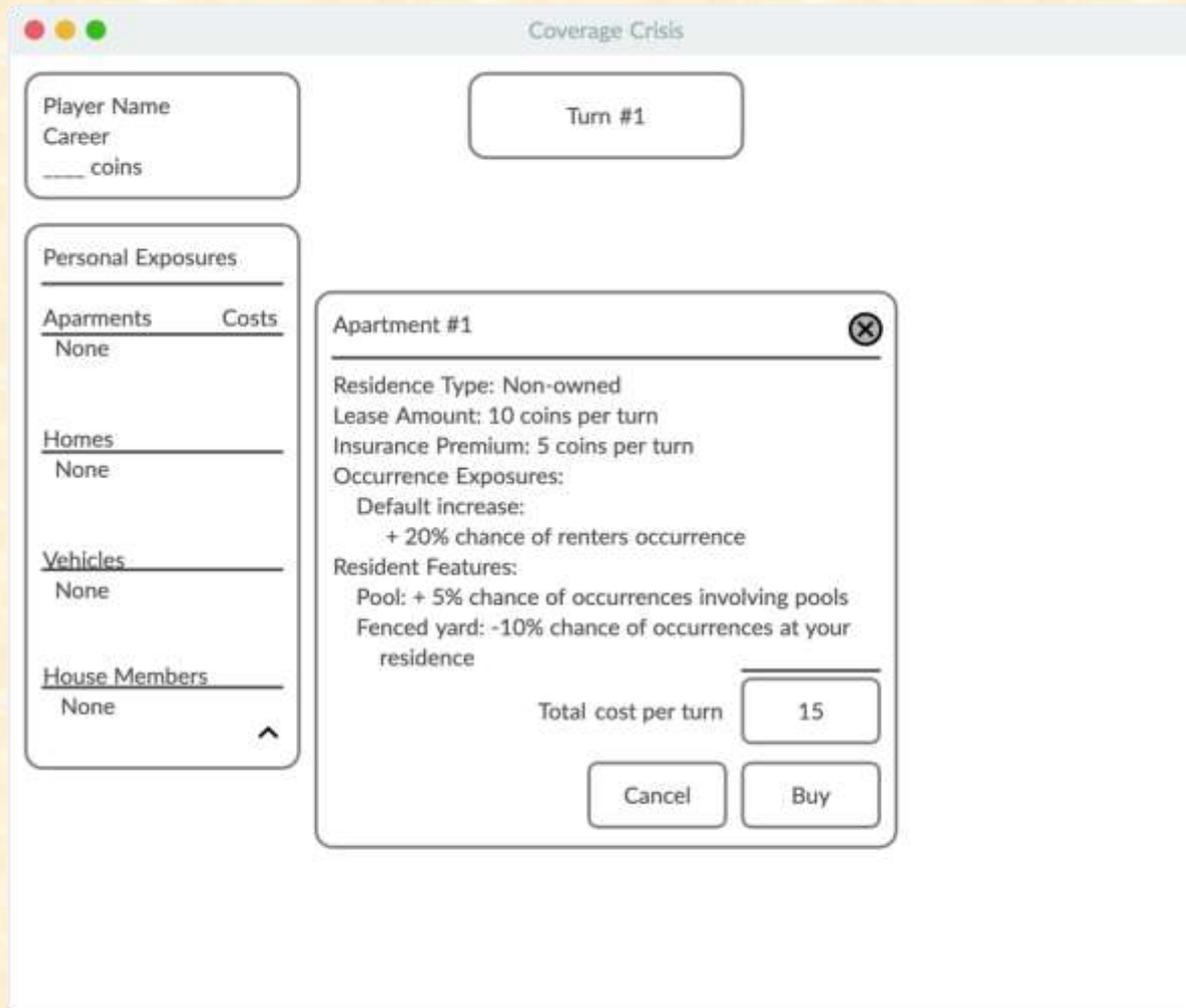
Total Coins

Continue

Screen Mockup: Player Activities



Screen Mockup: Shopping



Screen Mockup: Insurance

Player Name
Career
___ coins

Turn #1

Personal Exposures

Apartments Costs
Apartment #1 ___

Homes
None

Vehicles
None

House Members
None

Insurance Policies and Coverages

Renters Policy #1
Total Premium: __ coins per turn
Items Covered:
Apartment #1

Coverages:

- Coverage C - Personal Property ?
Limit of Insurance: __ coins per turn
- Coverage E - Personal Liability ?
Limit of Insurance: __ coins per turn

Total cost per turn

Cancel Insure

Coverage C - Personal Property
Covers damage to belongings (other than vehicles) resulting from an occurrence

Screen Mockup: Occurrence

Coverage Crisis

Player Name
Career
___ coins

Turn #5

Personal Exposures

Aparments	Costs
Apartment #1 ___	

Homes
None

Vehicles
Vehicle #1 ___

House Members
None

Occurrence:

While driving your car on your way to work, you make a left had turn and the passenger side of your car is hit by an oncoming vehicle. Both vehicles are damaged and the driver of the other vehicle suffers a fractured clavicle.

Bodily Injury Liability: __ coins
Property Damage Liability: __ coins
Collision: __ coins

Total cost: _____

Continue

Screen Mockup: Admin Tool

Refresh Player Search

Player Name	Date ▲	Difficulty ▲	Score ▲	Detailed Info
PL1	9/27/1776	Normal	50	
PL2	9/22/1776	Normal	1025	
PL3	9/22/1776	Hard	745	
PL3	9/25/1776	Easy	500	
PL4	9/25/1776	Normal	400	
PL4	9/26/1776	Normal	575	
PL4	9/26/1776	Hard	1000	
PL5	9/25/1776	Normal	890	

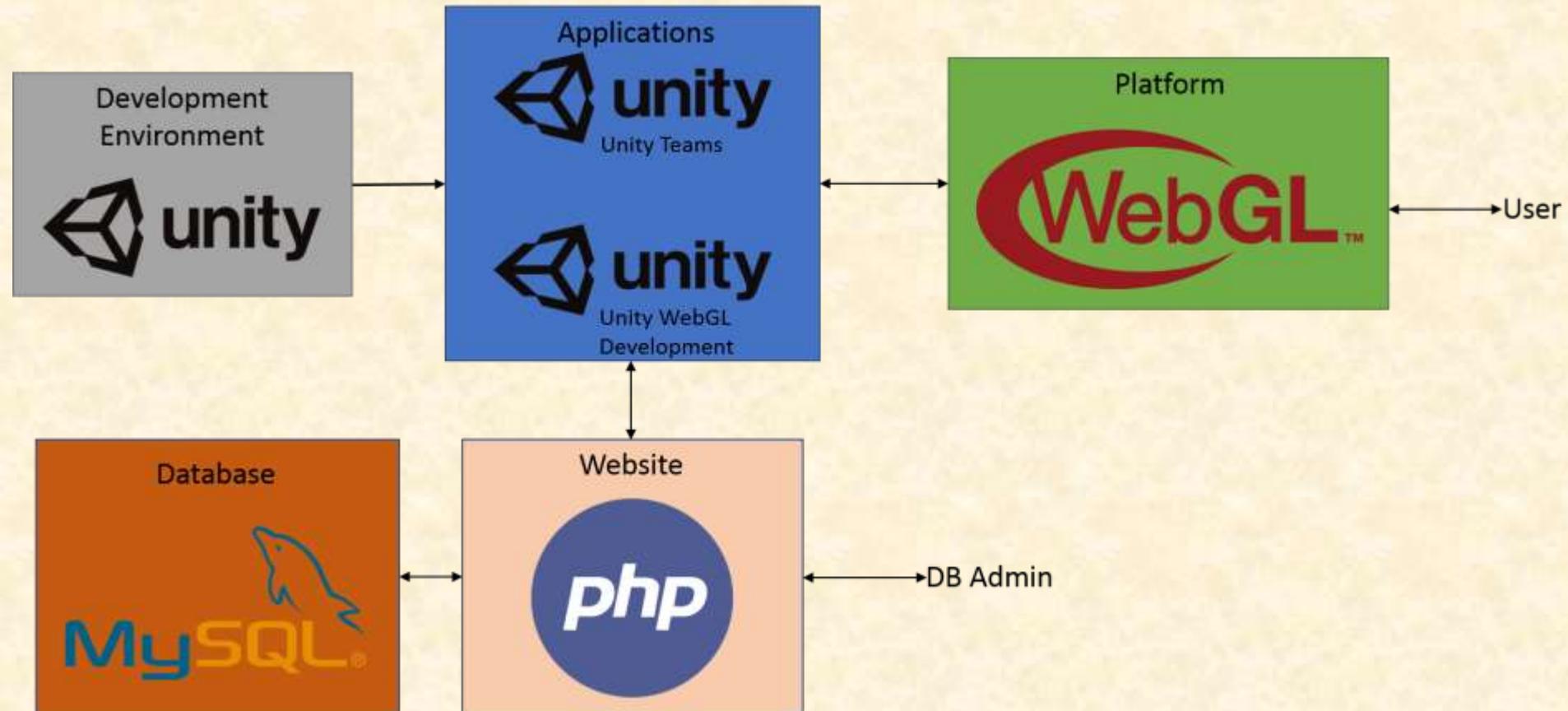


Technical Specifications

- Developed through Unity collaborating with Unity Teams
- All scripting is C#
- Database is MySQL communicated through PHP server-side scripts
- DB Admin communicates to the DB through a PHP webpage, which will be secured
- User views DB data through game application, Unity gets data from DB through the PHP scripts



System Architecture



System Components

- Hardware Platforms
 - General WebGL application can be accessed through compatible browsers on compatible systems (i.e. Google Chrome compatible devices)
- Software Platforms / Technologies
 - Unity developmental environment
 - PHP - PDOs
 - MySQL



Risks

- Game Balance
 - Ensuring the game is not exploitable and can be enjoyed on multiple difficulty levels, preserving the game's identity and teaching players correct information.
 - Spending an ample amount of time to test playthroughs, and tweak data until satisfied.
- Component Prioritization
 - In order to reach the testing phase of development, we are going to need to prioritize key elements of our project with regards to scheduling.
 - By prioritizing completion of the game loop, we will enable ourselves the opportunity to get a feel for the games playability and alter specifics later.
- User Authentication
 - We need to protect our user's data, ensuring that both their connection, and our database are secure.
 - By testing methods of bypassing our login system, we will be more certain of our authentication system.



Questions?

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