

System Design Document

NeverOvertime

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Front End Classes:

Class name: HomePage	
Responsibilities: <ul style="list-style-type: none"> • Provides a menu to navigate to other pages • Show Shop Icon • Show Play Button • Create appealing UI • Show user icon (avatar, name) 	Collaborators: <ul style="list-style-type: none"> • All other Pages (because HomePage is what the users use to navigate to other pages)

Class name: ShopPage	
Responsibilities: <ul style="list-style-type: none"> • Shows the items that can be purchased, and allow the user to buy the items. • Show bank balance 	Collaborators: <ul style="list-style-type: none"> • The Shop class at the back end • Profile class (Profile stores money)

Class name: GamePage	
Responsibilities: <ul style="list-style-type: none"> • Show card distributed • Able to see user card when the round starts • change bank balance after winning or losing 	Collaborators: <ul style="list-style-type: none"> • The game class at the back end • Profile class (Money can be added to Profile when the game is being played.)

Class name: AchievementPage	
Responsibilities: <ul style="list-style-type: none"> • Allow user to view finished/unfinished achievement • Display UI design • Allow user to claim achievement reward 	Collaborators: <ul style="list-style-type: none"> • The achievement class • The GamePage class • The Game class

Class name: ProfilePage	
Responsibilities: <ul style="list-style-type: none"> • Allow users to see details of their account. • Show Avatar • Basic Stats • Able to search friends profile and their stats • UI of user account 	Collaborators: <ul style="list-style-type: none"> • The profile class • The Game class (you get tokens or money added to Profile, which will be shown on the ProfilePage)

Back End Classes:

Class name: Home	
Responsibilities: <ul style="list-style-type: none"> • Allow user to navigate to different page/screen 	Collaborators: <ul style="list-style-type: none"> • Profile class • ProfilePage class • Game class • GamePage class • Achievement class • Shop class

Class name: Shop	
Responsibilities: <ul style="list-style-type: none"> • Contains items that can be purchased in the game, and allow the users to buy them. 	Collaborators: <ul style="list-style-type: none"> • The Profile class (because Profile stores money/tokens) • ShopPage class

Class name: Game	
Responsibilities: <ul style="list-style-type: none"> • Able to distribute cards • create AI • record wins or loses • Keep track of basic game stats and check achievement 	Collaborators: <ul style="list-style-type: none"> • Achievements class • GamePage class

Class name: Achievement	
Responsibilities: <ul style="list-style-type: none"> • Give the user the correct reward amount for its completed achievement 	Collaborators: <ul style="list-style-type: none"> • Game class • AchievementPage class

Class name: Profile	
Responsibilities: <ul style="list-style-type: none"> • Register users account when created • Stores the details of user accounts. • Secure password • Allow users to delete their accounts. • List of friends • Search up friends 	Collaborators: <ul style="list-style-type: none"> • Game class (stats) • ProfilePage class

Software Architecture Diagram

