

Work Experience

- Feb 2023 – **Mobile Game Developer**, *Narcade*, Istanbul, (Team of 60).
Present *Casual puzzle games - Farm Blast, Farm Bubbles, Friends Adventure Blast - Unity2D, Zenject, DOTween*
- Utilised dependency injection and MVC patterns to implement main map screen UI functionality with Unity C#. Including pop-up management and player data representation, such as daily events, quest and decoration complete screens and item purchase pop-up sequences.
 - Performed several rendering optimisations for UI systems by removing unnecessary render calls to the UI render pipeline by applying movement to the camera instead of the UI layer which allowed in 25% increase in frame rate and improving the speed of UI navigation.
 - Created a swipe and scroll system for layered inputs between different screens allowing for smooth navigation between main map screens, the in-game store, and the level list.
 - Developed utility functions for the player camera such as sequential movement and screenshot saving for use in conjunction with other UI systems in the game which helped improve player experience in-game by allowing real time updates to level thumbnails.
- June 2021 – **Mobile Game Developer - Internship**, *Mavis Games*, Istanbul, (Team of 3).
Aug 2021 *Casual puzzle game - Match-3 based RPG game - Unity2D, DOTween*
- Integrated a customizable playing field with different enemy and player heroes, as well as an extendable set of gems and more than 6 powered-up variants into an existing grid system.
 - Implemented the necessary functions for Match-3 RPG gameplay on a customizable rectangular grid such as the state machine functionality for enemy and player turns, as well as the behaviour of gem movement and checking for matched patterns.
 - Created a power combination system based on power-up priority to be used when 2 powered-up gems affect each other, and perform a merged version of their effects.
 - Created an easily scalable ability system that can be configured for used by either enemy or player characters, with an effect and targeting type system that utilises shallow-inheritance and OOP abstraction in C#.
 - Implemented a scriptable object based level system that allows for loading different combinations of enemy and player characters on differently sized play fields.
 - Implemented a scalable power-up system that creates power-ups in the playing field dependent on the shape of gem combinations using a list of easily editable binary matrices to represent unique shapes on the 2D grid that have priority over each other.
 - Worked in collaboration with the head developer and designer to deliver a feature complete proof of concept for a game prototype similar to Empires&Puzzles.
- June 2020 – **Mobile Game Developer - Internship**, *Uncosoft*, İzmir, (Solo).
Aug 2020 *Prototype hyper-casual game with skydiving theme - Unity3D*
- Developer a gameplay loop consisting of 2 separate stages with different gameplay mechanics, with a game over state when the player failed both stages.
 - Developed two gameplay loops that feed into one another where you dodge obstacles while falling until you fail and then are able to recover from the failure by shooting targets in mid air.
 - Created a tiling landscape where object pooling was used to handle the hardware load of loading and unloading moving terrain assets and props.
 - Developed an animated player character that seamlessly switches between different play areas and camera perspectives.

Education

2018–2023 **Bachelor's Degree - Computer Science**, *Bilkent University*, Ankara - Turkey.

Languages

Turkish: Native **English:** Professional **Russian:** Beginner

Knowledge Area

Intermediate Unity, Godot, WebGL/OpenGL, GitHub, GDScript, GameMaker:Studio, GameMaker Language, Java, C/C++, C#, Zenject, Javascript, Python

Basic Selenium WebDriver, Basys3 FPGA, SystemVerilog, UML, MySQL

Achievements

- 2019 **Founder and President of Bilkent Game Developers Club.**
2018 **Entrance to Bilkent University as a Comprehensive Scholarship Student.**
2018 **845th in the National University Entrance Exam Mathematics and Science category.**
2018 **58th in the National University Entrance Exam Foreign Languages category.**