PROJECT LILY PAD

GAME MANUAL

GEOGAMES AND NSF REU
ROCHESTER INSTITUTE OF TECHNOLOGY

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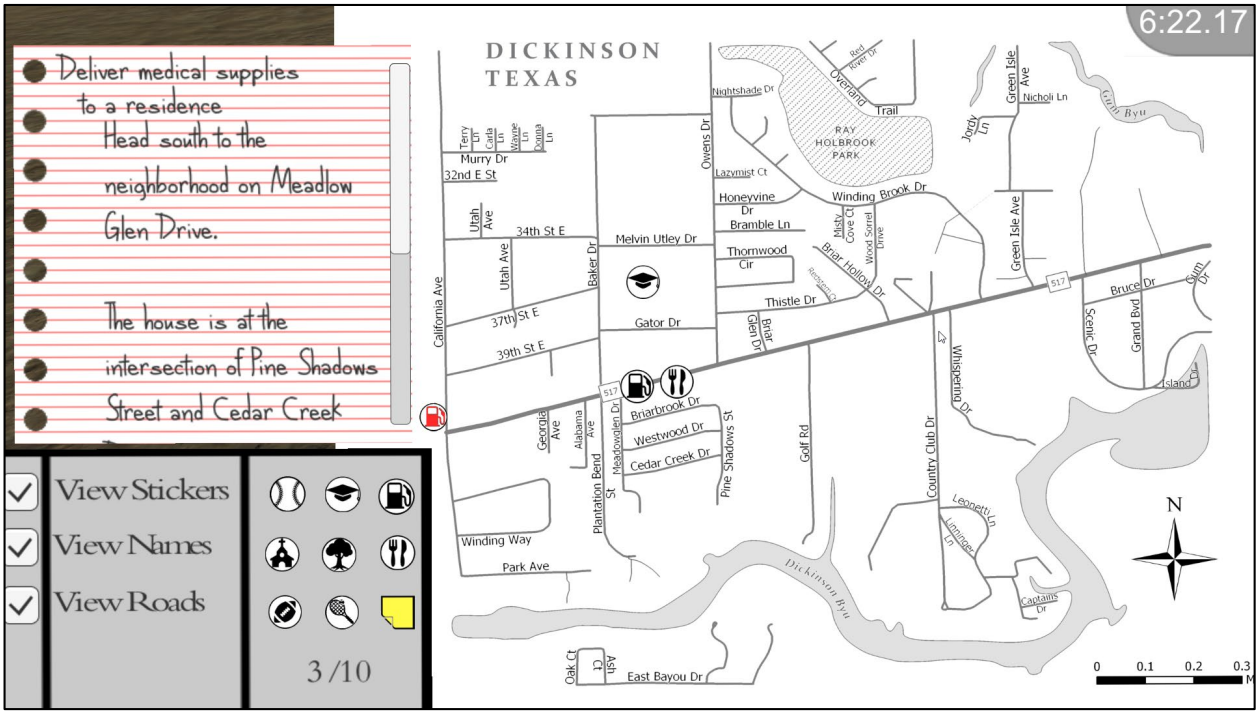
INTRODUCTION

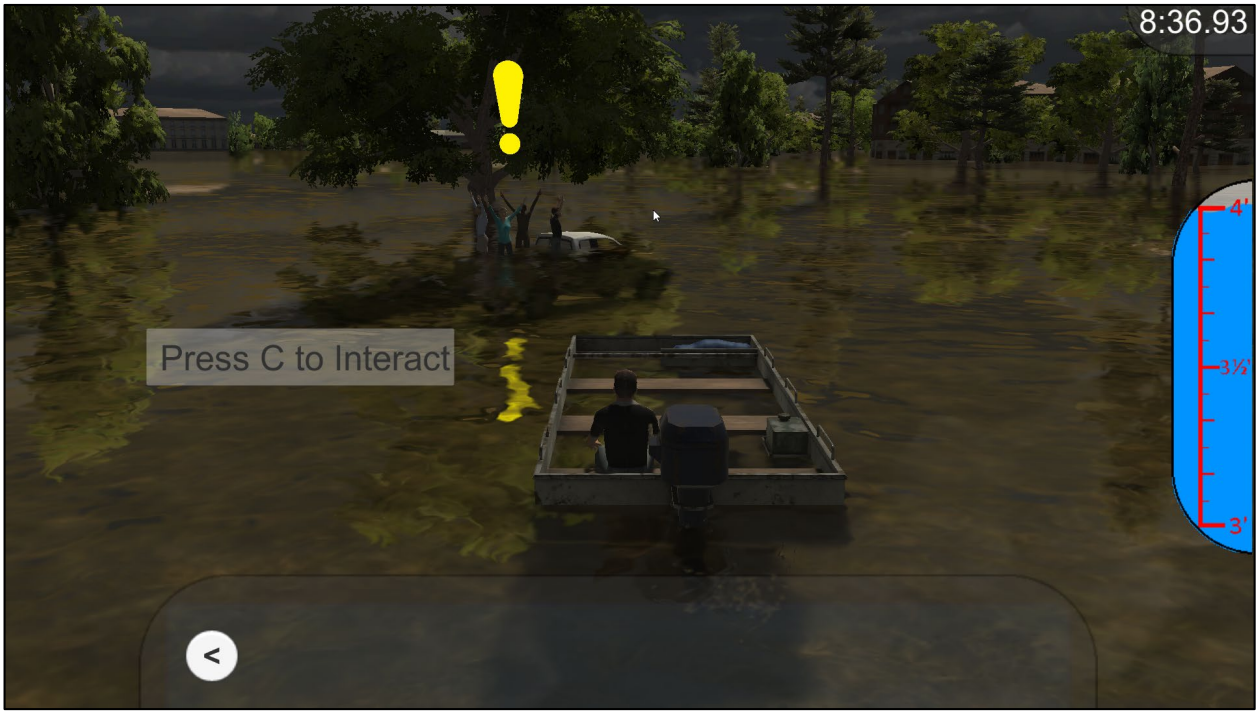
Project Lily Pad is a Serious Geogame developed with the purpose of teaching spatial thinking in terms of disaster resilience. The game is set in the city of Dickinson, Texas, where Hurricane Harvey made its presence on 30th August 2017. Day 1 of the game requires the player to think spatially in unfamiliar territory and navigate using instructions and a paper map to drop off supplies. In Day 2, the player plays as a Cajun Navy officer, (Cajun Navy are an informal group of rescuers from Louisiana and adjacent areas who helped in the hurricane scenario) rescuing people and dropping them off at locations that have elevation, resources and are recognizable as landmarks, coined as "Lily Pads".

The game was developed integrating Geographic Information System (GIS) which was achieved by navigating and transferring data from Open Street Map to ArcGIS to CityEngine to Unity. The elevation model and flood data was used to model the city and recreate the game with almost real life accuracy.

This game is targeted to all audiences as every citizen should be aware of disaster resilience with respect to flooding or hurricanes. We hope the game can set a framework for many such games in the future as well as play an important role in preparing people better for future disaster.

Screenshots:





If you found this document before you found the game, head to http://bit.ly/projectlilypad to play the game.

SYSTEM REQUIREMENTS

This game has a city model and flood water that might require a PC of higher specifications to run smoothly. Thus, there are certain recommended requirements to run the game. However, it is not a hard and fast rule. Since we have had very limited testing until now, feel free to install the game if you have lower specs than mentioned. And shoot us an email describing how well it runs, we would really appreciate it.

OS: 64-bit Windows 7, Windows 8, Windows 10

Processor: Intel Core 2 Quad CPU Q6600 @ 2.40 GHz

Memory: 4GB RAM

Video Card: NVIDIA GeForce GTX 960

Free Hard Drive Space: 2GB

Graphics: DirectX 11 Compatible

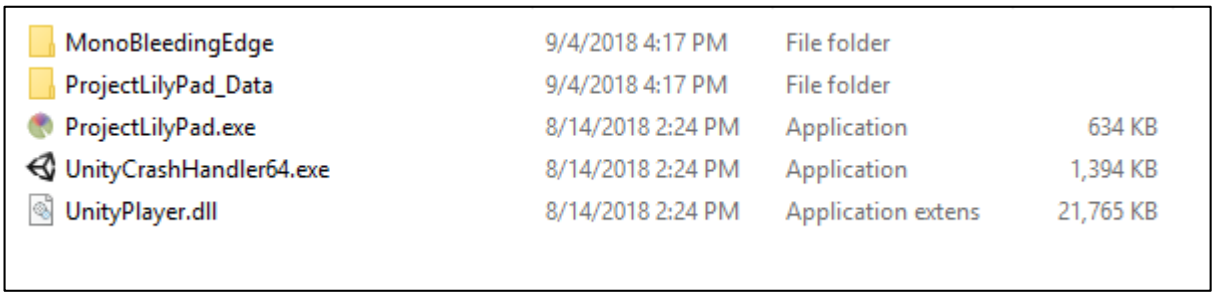
INSTALL INSTRUCTIONS

If you do not have a copy of the game already, Go to: http://bit.ly/projectlilypad

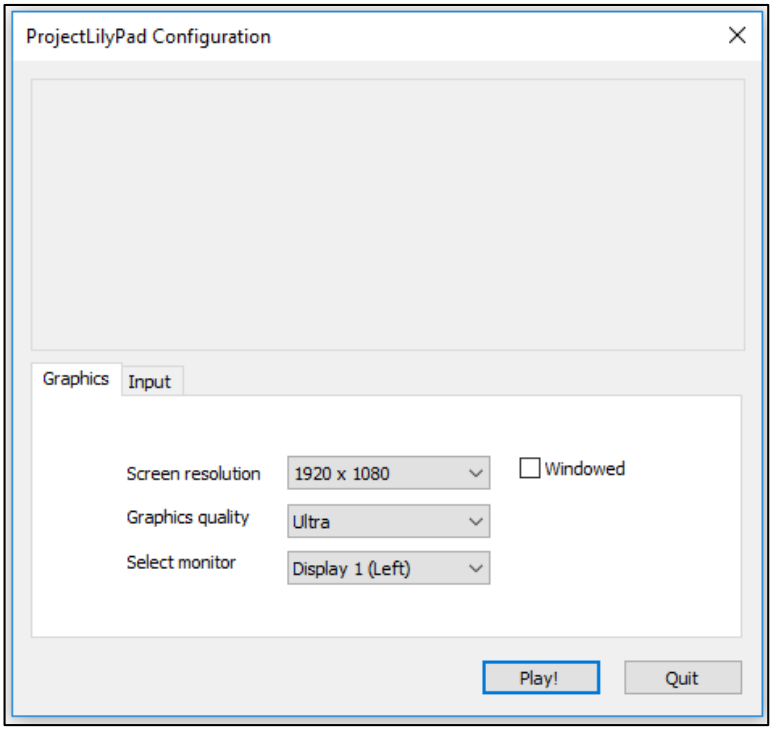
Download the folder.

HOW TO PLAY

Once the folder is downloaded, unzip it. Open the folder open ProjectLilyPad.exe to start playing.



The Unity window will pop up, and these are the recommended settings to play the game, but feel free to change them if needed.



These are a few instructions to play the game. The instructions will also pop up as and when required in the game.

Game Controls:

- W, Up Arrow – Move Forward
- A, Left Arrow – Move Left
- S, Down Arrow – Move Backward
- D, Right Arrow – Move Right
- M – Open/Close Map
- C – Interact with people
- Escape – Pause the game / Pause menu
- Click arrows to read the next or previous dialogues

Map Controls:

- Click on the sticker you wish to select and place it using the left mouse button
- Right click on a sticker to remove it
- You can place a maximum of 10 stickers on a map at a time

TECH SUPPORT

If you need tech support, or give us feedback or you just want to say hi, feel free to email us at reugeogames@gmail.com or https://reugeogames.wixsite.com/projectlilypad

Fill the Subject Field with “Project Lily Pad”

The body should contain information about your:

-Windows version

-Core processor

RAM Memory

Video Card and its driver version

Detailed problem discussion

CREDITS

Development Team:

- Anushka Nair
- Jordan Machalek
- Nathan Terrell
- Nicolas San Jose

Research Team:

- Amy Walker
- Casey Lane
- Claudia McDaniel
- Deborah Orieta
- Emily Gawlik
- Matthew Plummer
- Scott Williams

Under the guidance of:

Dr. Brian Tomaszewski

Dr. David Schwartz

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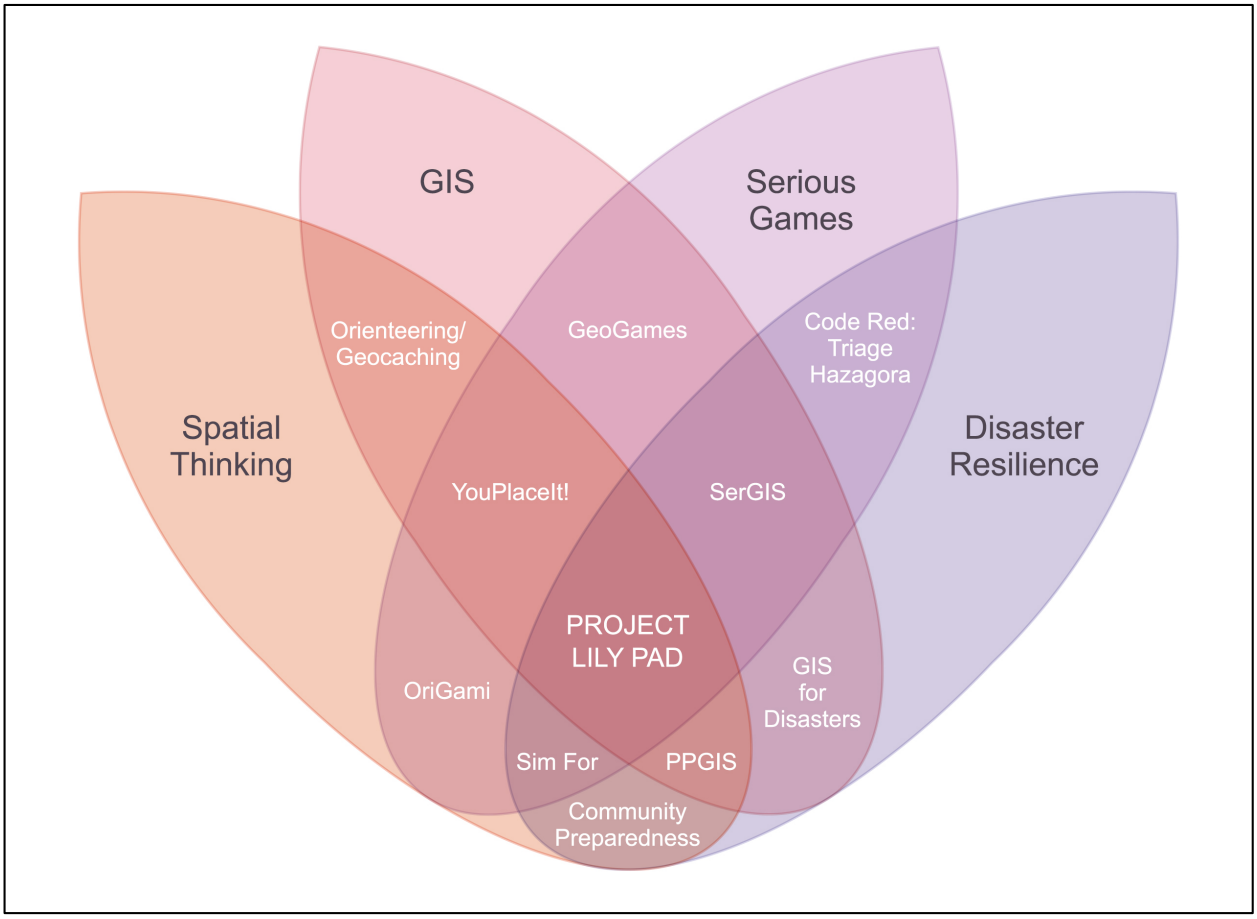
- **School of Interactive Games and Media at RIT**
- **And thank you to all additional supporters and play testers for their contribution. And thank you, player, for playing. Every contribution is helpful for making Project Lily Pad and other games of its kind, a success.**


GIS
Serious Games
Spatial Thinking
Disaster Resilience
Orienteering/ Geocaching
GeoGames
Code Red: Triage Hazagora
YouPlaceIt!
SerGIS
PROJECT LILY PAD
OriGami
GIS for Disasters
Sim For
PPGIS
Community Preparedness