Letter Storm

Shoot First, Spell Later!

Brought to you by **GGProductions**
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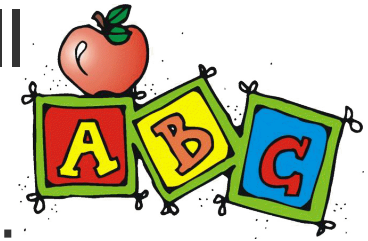
Overview - Problem

- Every child has to learn how to spell
- Learning is (generally) not fun
- Learning occurs best when learner is engaged (ie having fun)
- Much learning software is not fun



Overview - Solution

Letter Storm: a learning game that...

- is, first and foremost, an entertaining game
  - 2D vertical-scrolling shooter
  - enemies, obstacles, power-ups, bosses, score
- tightly integrates learning challenges
  - collect letters from enemies
  - use them to defeat bosses by spelling words

Overview - Solution (cont.)

Letter Storm: a learning game that...

- rewards accomplishments
- is customizable
  - player avatar, enemy difficulty, and words learned
- is kid-friendly

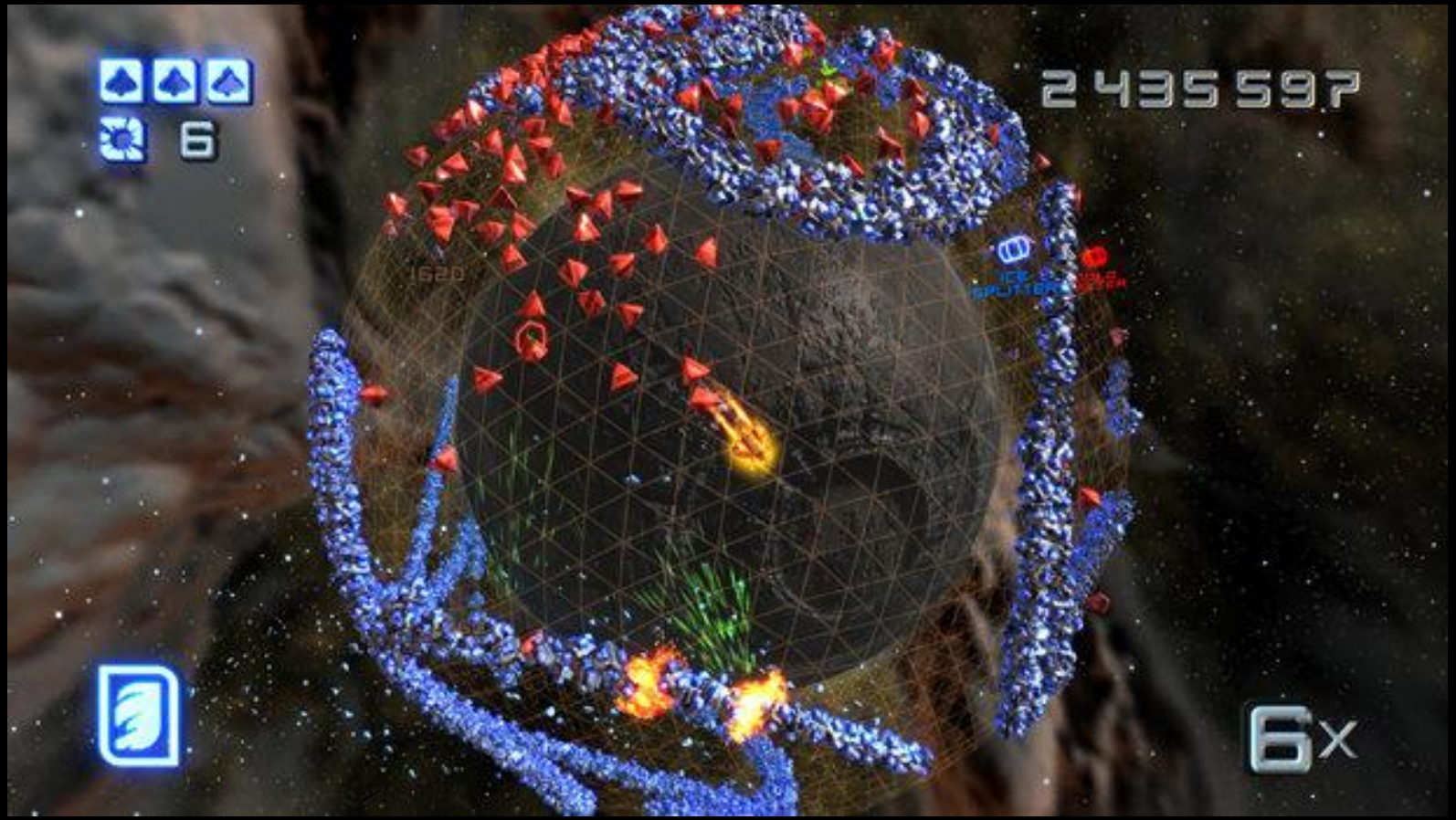
Related Works

Super Stardust HD

DoDonPachi

Z-Type

Pocky & Rocky


6
2435597
6x

Related Works

Super Stardust HD

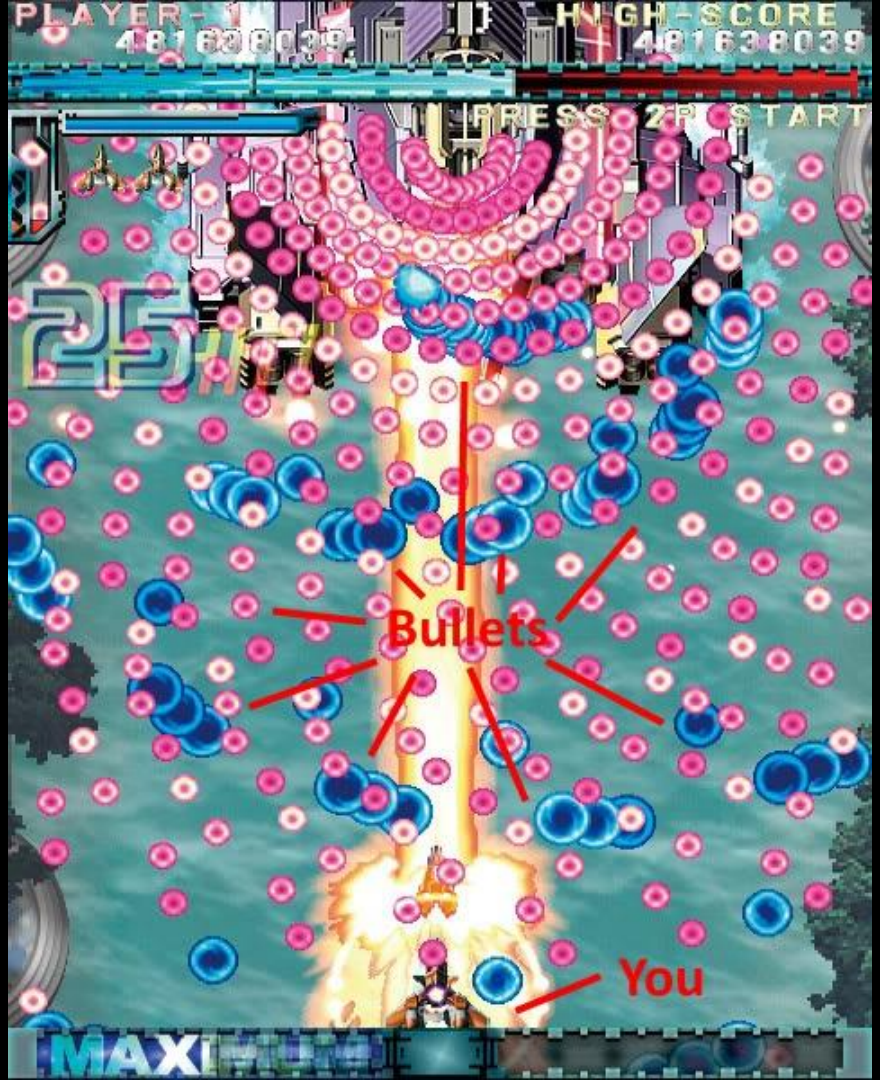
DoDonPachi

Z-Type

Pocky & Rocky


PLAYER-1
HIGH-SCORE
4816380390
PRESS 2P START
25
MAX

Bullet Hell


PLAYER-1
HIGH-SCORE
4816238039
PRESS 2P START
Bullets
You

Related Works

Super Stardust HD

DoDonPachi

Z-Type

Pocky & Rocky


services
roll
admits
honest
farm
coding
taught
(2x) 000 145
Z-Type
Type to Shoot
made with
IMPACT

Related Works

Super Stardust HD

DoDonPachi

Z-Type

Pocky & Rocky


1P:3
0017930
TIME 270
2P:4
0017250

Requirements

General

- Playable and appropriate for children ages 5+
- Must allow players to spell words

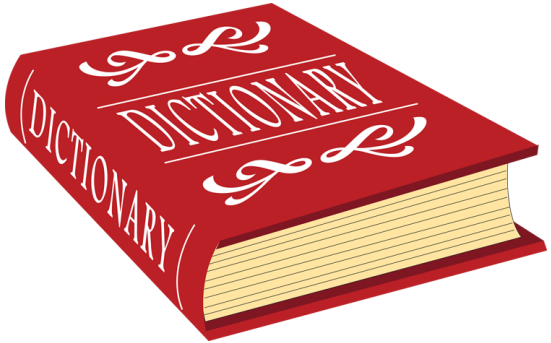
Target Environment

- Standalone desktop application on Windows
- Optional: web application with html

Requirements

Customizability

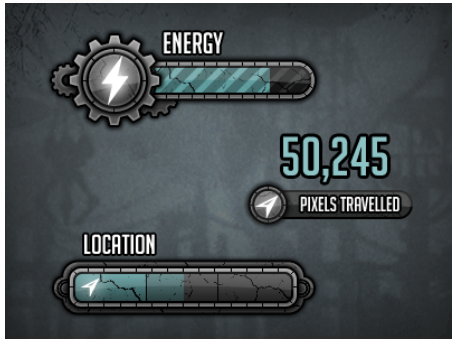
- Add customized words or word lists that can be used as part of the game
- Default dictionary is provided if custom word list not added
- Choose from a selection of 2 or more characters/avatars to play as



Requirements

Interface

- A keyboard as primary input to interact with game
- Optional: Mouse or a mouse-keyboard combination for input
- Menu for navigation and settings of game
- HUD, assists user in-game in keeping track of information crucial to gameplay (health, lives, etc.)



Requirements

Functionality


- Save file, saves current game state
- Load game state

Design & Strategy (Mainly 2D shooter)

- Enemies (small enemies and boss)
- Collectible items (letters for in-game play, power-ups)

- Defeat enemies with one or more weapons
- Defeat boss using collected items

Management

Risk management / Risk reduction

- Iterative and adaptive approach
- Phases / Scope
- Task tracking/monitoring

Us … the people

Management

Iterative and adaptive approach

- Reexamine our progress.
- Arrow vs missile - course correction. (Mike Cohen, Succeeding with Agile)
- Improve process dynamically.

  Ask the team during review (1’st half iteration)

  -What should we stop doing?

  -What did we do well ?

  -How can we improve ?

Management

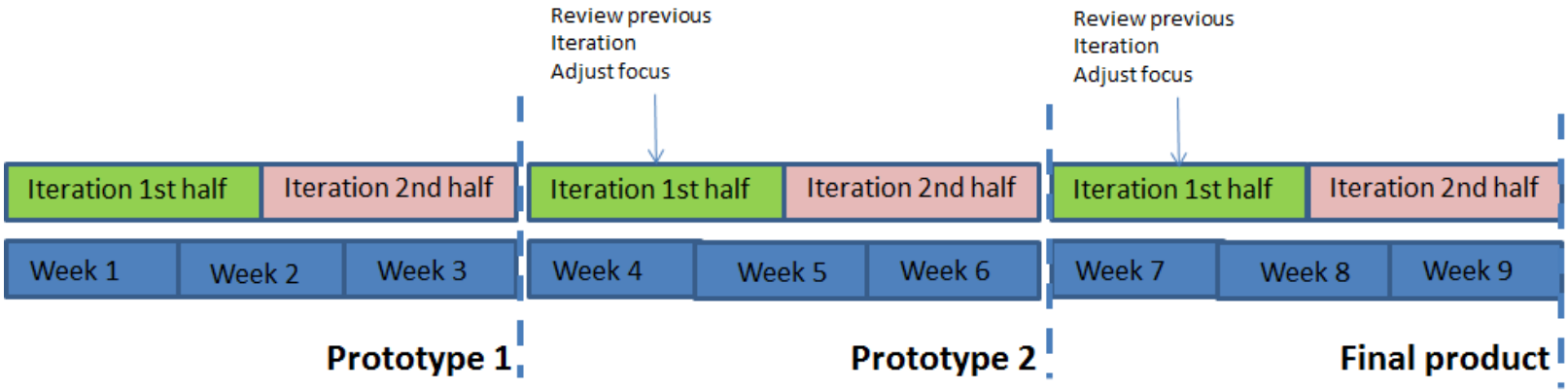
Phases and scope

- Start and end of an iteration.
- Minimal Scope -> modular expansion
- Date vs State:

  Dates are set, but state will be discovered.

Management

Iterations (post SPPP)



Management

Task tracking/monitoring

- Flash card user stories and conversations.
- Pivotal Tracker Velocity (only after 1st iteration).
- Daily individual email
- Weekly report
- Retrospect scrum evaluation

Management

People

- If (team.Mates == friends) { team.success(); }
- Communication
- Development environment

VS

Quality Assurance Content

- Metrics
- Standards
- Inspection
- Testing
- Defect Management

Quality Assurance Metrics

Product Metrics: Size, Quality level, Customer Problems, Customer Satisfaction

Process Metrics:Customer Satisfaction, Defect Repair rate

Logged and Tracked with Metrics Tracking table

Quality Assurance Standards

Reference: GGProductions Code Standards using C#

do use **PascalCasing** for abbreviations 3 characters or more (2 chars are both uppercase)

do not use **Underscores** in identifiers. Exception: you can prefix private static variables
with an underscore.

Quality Assurance Inspection

- 2 Person code teams: Done after any coding within the 2 person team and after any commit or push to main project
- Team Inspection: Done during weekly group meetings facilitated by Project Manager

Quality Assurance Testing

- Planning: GUI, Game, Endurance, Compatibility and Unit Testing
- Preparation:
- Inspection Meeting: participants discuss what happened and how to adjust
- Rework: (execute solutions)
- Follow-up:(did the rework solve the issues)
- Improve Process: can the solution be improved upon.

Quality Assurance Defect Mgmt

Use Github, PivotalTracker and Defect Management Table

Order of priority	PRIORITY	SEVERITY	TYPE
1	High	High	High
2	High	High	Medium
3	High	Medium	Medium
4	Medium	Medium	Medium
5	Medium	Medium	Low
6	Medium	Low	Low
7	Low	Low	Low

Configuration Management Plan

Tools

Unity 4.5 -- Game Engine/IDE

Visual Studio 2013 -- C# IDE

Git 2.1.1 -- DVCS

Blender 2.7-- Modeling and Animation

Gimp 2.0 -- Image Processing

Chiptune and FL Studio-- Music

Branching Model

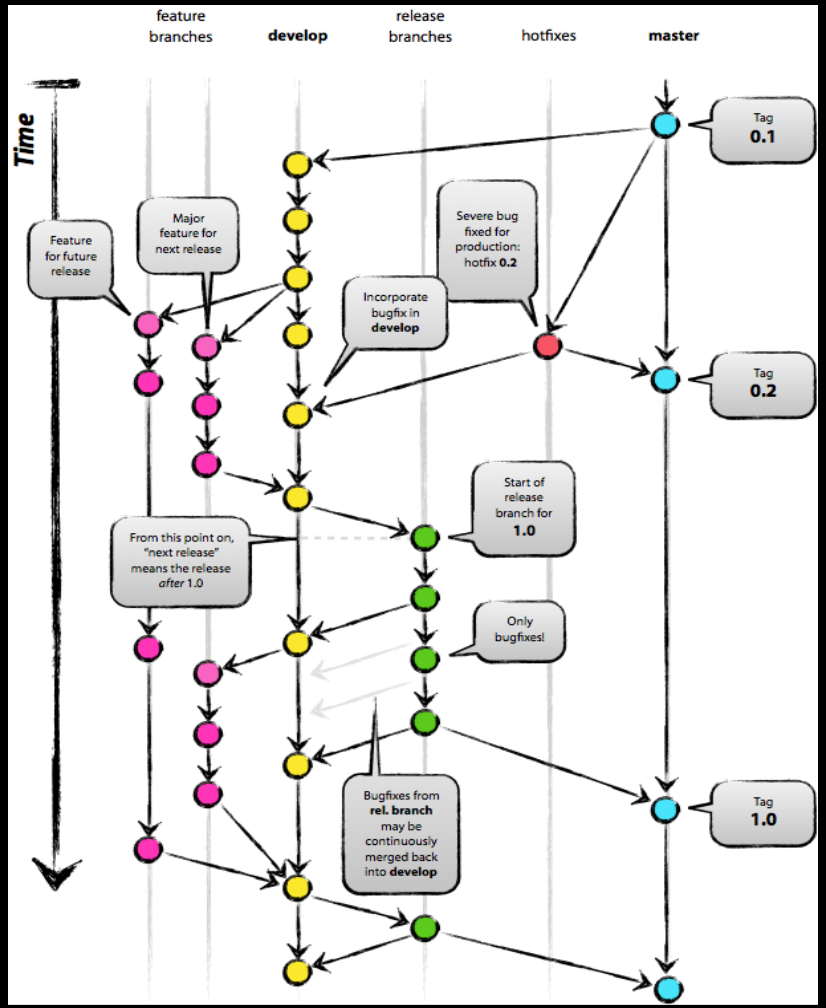
Master

Develop

Features

Releases

Hotfixes



http://nvie.com/img/2009/12/Screen-shot-2009-12-24-at-11.32.03.png

Committing

Commit to master = new release, version bump

Always use --no-ff when merging

Merging release to master? 0.1 > 0.2

Merging hotfix to master? 0.1 > 0.1.1

Features always branch off from develop