

Brick Breaker (COMP2042)

- This is a remake of the Brick Destroy game made by FilippoRanza (link) for Software Maintanence (COMP2042) coursework, Fall 2021
- Made by Shanahan Suresh, Student ID 20319174.

About the Game

The goal of the game is to break all the bricks in a level by bouncing a ball with a rectangular paddle, similar to Pong.

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1. Refactoring Activities

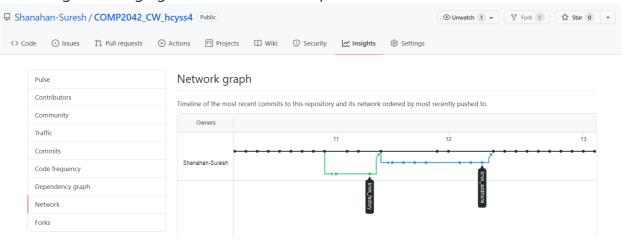
- Packages and organisation: Initially, all the classes were used in the project were
 located in the same directory resulting in unorganized classes that were hard to work
 with. The classes have since been grouped together in related packages (Balls, Bricks,
 Walls etc) to enhance maintainability and organisation of the project.
- General refactoring activities: The following activities were applied to many, if not all classes
 - Renaming variables and methods with descriptive names
 - Initializing variables
 - Reordering methods in a class according to related methods
 - Separating huge blocks of code into various methods, including constructor methods
 - Including getter and setter methods to access variables
 - Removing unused variables, methods and import statements
 - Applying Guard Causes in if-else statements (Brick class)
 - Pushing up methods in child classes (Brick class)
 - Breaking apart complicated lambda expressions into seperate methods (GameBoard class)
 - General code formatting
- Extracting classes out of a single class: Certain classes within the code held too many responsibilities for a single class, these classes were then fragmented and split off into separate classes for the purpose of maintainability and encapsulation. The new classes are: Crack class from Brick, LevelCreate from Wall
- **Design Patterns:** The Factory Design Pattern was applied in the creation of Brick objects and Sound objects
- MVC Pattern (Incomplete): Initially the project was planned to apply the Model, View, Controller design, but it proved to be too complicated for my current capability. As such they are only organized in the MVC style. At the very least, I believe the Model package is correct and incorporates the all classes that are meant to be in Model.
- **JUnit Tests**: JUnit tests were created for various different classes to ensure that the project will still function as intented following any future modifications. The classes are located in a designated test folder.
- Javadocs: Javadoc comments were added to all public variables and methods, they were also added to certain protected and private methods. The generated Javadocs is in its own dedicated folder.

2. Additions

- 1. Background images to menus
- 2. Instruction menu
- 3. High Score function and menu
- 4. Game timer
- 5. Sound effects
- 6. Made window resizeable
- 7. New Brick type (Diamond) and new level

3. Version Control

- Git is used as the version control system for this project, the remote repository for this project is located here (link)
- Branching and merging were conducted for specific additional features:



• Every commit message was intended to be short and meaningful. The commit messages can be expanded for further details.

Releases

No releases published

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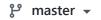
Packages

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Languages

● HTML 84.5% ● Java 11.9% ● CSS 2.0% ● JavaScript 1.6%

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-**O**- Commits on Dec 13, 2021

Alter README to fit only 500 words Shanahan-Suresh committed 2 minutes ago Created a folder for project PDFs and screenshots Shanahan-Suresh committed 10 minutes ago **Updated README shanahan-Suresh** committed 10 minutes ago Generated all JavaDocs in a JavaDoc folder Shanahan-Suresh committed 2 hours ago Revert "Maven build" ... Shanahan-Suresh committed 2 hours ago Generated JavaDoc files and used Mayen to build ... Shanahan-Suresh committed 2 hours ago Generated JavaDocs for the project ... Shanahan-Suresh committed 4 hours ago Add Javadocs for Classes under the View package ... Shanahan-Suresh committed 4 hours ago Add Javadocs for Classes under Controller package ... Shanahan-Suresh committed 5 hours ago Add Javadocs for the Player class ... Shanahan-Suresh committed 5 hours ago Add Javadocs for Classes under the Walls package ... Shanahan-Suresh committed 5 hours ago Add Javadocs for Classes under the Sounds package ... **f** Shanahan-Suresh committed 6 hours ago Moved audio files into Resources folder Shanahan-Suresh committed 6 hours ago

https://github.com/Shanahan-Suresh/COMP2042_CW_hcyss4/commits/master

Shanahan-Suresh committed 6 hours ago

Add Javadocs for Classes under the Balls package ...

Add Javadocs for classes under the Bricks package ...

shanahan-Suresh committed 7 hours ago

Reorganise all JUnit tests into a test package

‡ Shanahan-Suresh committed 8 hours ago

Create JUnit test for BrickFactory class ...

Shanahan-Suresh committed 8 hours ago

Create a JUnit test for GameTimer class ...

shanahan-Suresh committed 9 hours ago

Create JUnit test for HighScore class ...

Shanahan-Suresh committed 11 hours ago

Create Junit test for DebugPanel class ...

Shanahan-Suresh committed 11 hours ago

Create JUnit test for Player class ...

Shanahan-Suresh committed 11 hours ago

Create JUnit test for RubberBall class ...

Shanahan-Suresh committed 12 hours ago

Create a JUnit test for Wall class ...

shanahan-Suresh committed 12 hours ago

Create a JUnit test for SteelBrick class ...

f Shanahan-Suresh committed 12 hours ago

Include additional getter methods in Brick classes ...

file Shanahan-Suresh committed 12 hours ago

Commits on Dec 12, 2021

Fix a bug where HighScore write was not updating ...

Shanahan-Suresh committed yesterday

Include a link to HighScore in HomeMenu ...

‡ Shanahan-Suresh committed yesterday

Add a working HighScore feature to the game ...

‡ Shanahan-Suresh committed yesterday

Reorganize images into a seperate folder in Models

shanahan-Suresh committed yesterday

Reworked GameBoard to display a Timer ...

‡ Shanahan-Suresh committed yesterday

Included a method in Wall to get brokenBricksCount

Shanahan-Suresh committed yesterday

· ·	
Create a GameTimer class keep track of time taken Shanahan-Suresh committed yesterday	
Merge branch 'brick_additions' Shanahan-Suresh committed yesterday	
Create a new level for Diamond Brick to appear in Shanahan-Suresh committed yesterday	
Include DiamondBrick generation in BrickFactory Shanahan-Suresh committed yesterday	

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-**O**- Commits on Dec 12, 2021

Create a new Brick type, DiamondBrick ...

Shanahan-Suresh committed yesterday

Include a background to InstructionMenu

shanahan-Suresh committed yesterday

Commits on Dec 11, 2021

Add a background image to home menu ...

Shanahan-Suresh committed 2 days ago

Create a SoundFactory class

Shanahan-Suresh committed 2 days ago

Add a sound effect for cracking Cement Bricks ...

Shanahan-Suresh committed 2 days ago

Streamline Hitsound by making it subclass of Sound ...

shanahan-Suresh committed 2 days ago

Add a sound effect for when bricks are destroyed

🚺 Shanahan-Suresh committed 2 days ago

Merge branch 'brick_factory'

Shanahan-Suresh committed 2 days ago

Modify LevelFactory class into LevelCreate ...

Shanahan-Suresh committed 2 days ago

Intergrate InstrunctionMenu with HomeMenu ...

Shanahan-Suresh committed 2 days ago

Create an instruction menu ...

Shanahan-Suresh committed 2 days ago

Create BrickFactory class ...

🚺 Shanahan-Suresh committed 2 days ago

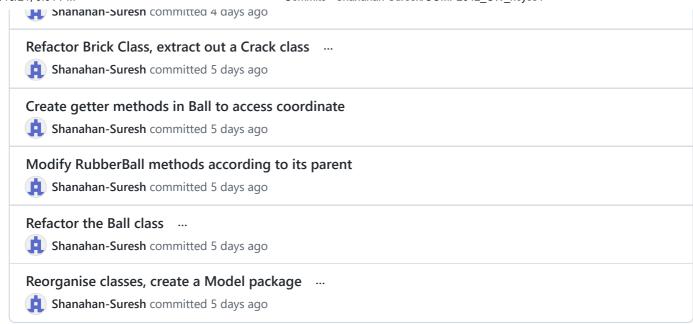
-o- Commits on Dec 9, 2021

Commits · Shanahan-Suresh/COMP2042 CW hcyss4 Fix issues related to Brick classes ... Shanahan-Suresh committed 4 days ago Fix bug where game screen doesn't update ... Shanahan-Suresh committed 4 days ago Refactor GameBoard class ... Shanahan-Suresh committed 4 days ago Slightly refactor DebugPanel class ... Shanahan-Suresh committed 4 days ago Refactor DebugConsole class ... Shanahan-Suresh committed 4 days ago Include a general 'try-catch' in GraphicsMain Shanahan-Suresh committed 4 days ago Slightly refactor GameFrame class ... Shanahan-Suresh committed 4 days ago Slightly refactor HomeMenu class ... Shanahan-Suresh committed 4 days ago Create View package and move in remaining classes Shanahan-Suresh committed 4 days ago Formatted code in LevelFactory and WallType class Shanahan-Suresh committed 4 days ago Created a WallType enumeration class Shanahan-Suresh committed 4 days ago Moved methods from Wall to LevalFactory Shanahan-Suresh committed 4 days ago Add Walls subpackage and empty LevelFactory class ... Shanahan-Suresh committed 4 days ago Move Wall class into Model package and refactor it ... Shanahan-Suresh committed 4 days ago Move Player class into Model and refactore it ... Shanahan-Suresh committed 4 days ago Create Controller package and modify GameBoard ... Shanahan-Suresh committed 4 days ago

Refactor all child classes of Brick

Shanahan-Suresh committed 4 days ago

Create getter methods in Brick to access colours



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-**O**- Commits on Dec 9, 2021

Sets up Git to ignore IntelliJ generated files

Shanahan-Suresh committed 5 days ago

-o- Commits on Nov 29, 2021

Initial commit

Iron_Ox committed 14 days ago

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Pulse								
Contribu	utors							
Commu	nity							
Traffic								
Commit	S							
Code fre	equency							
Depende	ency graph							
Network	(
Forks								

Network graph

Timeline of the most recent commits to this repository and its network ordered by most recently pushed to.



Network Graph · Shanahan-Suresh/COMP2042_CW_hcyss4					

Keyboard shortcuts available (i)