**Product Backlog**

Team 12

Austin Dewey, Joseph Nathan, Joseph Landis, Steven Motherwell, Stephen Kramer

**1.** **Problem Statement**

There is a lack of web-based games that appeal and relate to a Purdue University Student.

**2. Background Information**

Today’s world of entertainment comes through many outlets, however one of the most popular forms of entertainment in today’s world is video games. Video games have also claimed fame for smaller populations of players when there is in-game content that the target player can relate too. Being Purdue students, we decided upon a game that would be targeted towards our own school’s population. This is why we decided upon *Boilergod*, a game in which you combine Purdue-specific elements with others to create new combinable elements. This application will combine the popular feel of *Doodlegod* with life at Purdue to create a fun experience for all Purdue Students.

**3. Functional Requirements**

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| --- | --- | --- |
| **Backlog ID** | **Functional Requirement** | **Hours** |
| **1** | As a user, I would like to be able to save my game progress. | 3 |
| **2** | As a user, I would like to be able to restart my current game. | 3 |
| **3** | As a user, I would like to be able to view all created elements in a dedicated section. | 5 |
| **4** | As a user, I would like to have access to multiple elements for those which have been created. | 5 |
| **5** | As a user, I would like an area dedicated to combining the elements. | 10 |
| **6** | As a user, I would like instructions covering how to play the game. | 2 |
| **7** | As a user, I would like to know how many elements I have not made yet. | 3 |
| **8** | As a user, I would like to be able to create custom elements to suggest for game implementation. (if time allows) | - |
| **9** | As a user, I would like an animation for when I combine created elements and create a new element | 8 |
| **10** | As a user, I would like to drop elements on-top of each other when I try to combine them. | 5 |
| **11** | As a user, I would like an animation for when I combine created elements and fail. | 8 |
| **12** | As a user, I would like to open a notepad to write down what I have tried. (If time allows) | - |
| **13** | As a user, I would like a timer for how long I have been active in the game | 5 |
| **14** | As a developer, I would like to view user feedback on the application. | 7 |
| **15** | As a developer, I would like to receive suggested elements to consider for additional content. (if time allows) | - |
| **16** | As a developer, I would like to create and implement at least 50 elements. | 20 |
| **17** | As a developer, I would like to store user information without using a database. | 12 |
| **18** | As a user, I would like to be able to continue playing where I left off. | 2 |
| **19** | As a developer, I would like only certain element combinations to be capable of making new elements | 4 |
| **20** | As a user, I would like to be able to remove elements from the combination board | 3 |
|  | **Total:** | **105** |

**4. Non-Functional Requirements**

1. Our application must be playable on multiple browsers.
2. We must ensure there is no latency during any transitions in the game.
3. The application must be integrated with Gmail Login.
4. The application must be integrated with Facebook Login.
5. The application must be cross functional to work on Android Devices.
6. The application must be cross functional to work on Apple OSX Devices.
7. The application must maintain its usability across all devices and browsers.
8. Our elements must each be created and stored on our server as images.
9. The application must maintain the same theme in all stages of application transition.

**5. Use Cases**

**Case: Save game progress System Responses**

1. Select “Pause Game” button 2. Application loads paused game menu

3. Choose “Save game” option 4. Progress is saved according to login method

**Case: Start new game System Responses**

1. Enter website 2. Offers login options

3. Main page loads

4. Choose “New Game” option 5. Loads game board with current elements

6. Start timer for time spent in-game

**Case: Continue existing game System Responses**

1. Enter website 2. Offers login options

3. Main page loads

4. Choose “Continue Game” option 5. Loads game board from save state

6. Resume timer for time spent in-game

**Case: Restart current game System Responses**

1. Select “Pause Game” button 2. Application loads paused game menu

3. Choose “Restart game” option 4. Reloads game board default components

**Case: Interact with elements System Responses**

1. Select and drag element A to the 2. Application generates a new element object

combination area in the combination area

**Case: Delete an element System Responses**

1. Select and drag element A to the 2. Application generates a new element object

combination area in the combination area

3. Select and drag element A to the 4. Application deletes the object from

“Available Element” section the combination area

**Case: User combine element failure System Responses**

1. Select and drag element A to the

combination area

2. Select and drag element B onto A 3. Check if combination success

4. Fail, run combination fail animation

5. Return elements to available element section

**Case: User combine element success System Responses**

1. Select and drag element A to the

combination area

2. Select and drag element B onto A 3. Check if combination success

4. Success, run combination success animation

5. Give access to newly created element in available element section

6. Update created elements count

7. Update user’s gamesave-state

**Case: Send feedback System Responses**

1. Select “Pause Game” button 2. Application loads paused game menu

3. Choose “Send Feedback” option 4. Application loads textbox to type feedback

5. Select “Send” button 6. The message is sent to our dedicated email

**Case: New element suggestion System Responses**

**(if time allows)**

1. Enter website 2. Offers login options

3. Main page loads

4. Choose “Suggest Element” option 5. Dedicated canvas page is loaded

6. Design element

7. Select “Submit” button 8. The new element is saved as an image and

sent to our dedicated email

**Case: Take a note in-game System Responses**

**(if time allows)**

1. Select “Notepad” button 2. Application loads notepad screen

3. Enter notes

4. Select “Save” button 5. Saved game data is updated with new

notepad status