**Game Design Studio Two**

**“Mowdown”**

**Team Four**

Report for Sprint Five

12 / OCT / 2015 – 25 / OCT / 2015



**Team Members:**

Matthew Carver –12028130

Deinyon Davies – 11688025

Robert McClelland –11743693

Dinh Bao Anh (Brendan) Vo – 11437237

The most honoured Master of the Scrum,SirJesse Walker – 11729631

**OVERVIEW**

*Mowdown* is a ‘Demolition Derby’ or ‘Battle Bots’ style videogame, created by (in ascending alphanumeric order) Matthew Carver, Deinyon Davies, Dinh Bao Ahn (Brendan) Vo, Robert McClelland , and Jesse Walker.

Players customize one of several domestic **lawnmowers** by means of attaching defence appliances and weapons that have been unlocked and purchased by the player by means of in-game currency. Players compete against at least one autonomous opponent – a strategically formed battle-mower – as if both are controlled via Remote Control (R.C.).

Sprint Five was designed to improve the overall Quality of Life for the player as well as apply some much needed polish to the game. To this end a tutorial was added and the game loop was completed including money gain and an unlockable attachment system.

**SPRINT PLAN AND EXECUTION**

Sprint Four of Project Mowdown set out to implement nine discrete new features including (but not limited to): A new main menu, the implementation of the ‘game loop’, a basic tutorial message system and an AI that improves in difficulty as the player progresses further.

As of the preliminary Sprint Meeting, the Sprint Log proposed a **total** **estimated** investment of **2,820 minutes** – 2,530 minutes less than the estimated investment for Sprint Four – with an estimated **median** task duration of **120 minutes**. The sprint would optimistically be completed in 1,730 minutes.

This sprint focused largely on improving the quality of life for the player as well as improving the game to the point of a deliverable product rather than a presentable ‘tech demo.’ To accomplish this the team took away almost all tasks that counted as ‘adding content’ and focused on improving the content that already existed within the game. Lastly the team completely avoided adding any tasks to the sprint mid-sprint so as to avoid any ‘scope creep.’

This sprint was also during the very last few weeks of the semester; due to this several other assignments were due around this time. For most of the sprint the team was indisposed completing work for other assignments and this lowered workload helped to still complete both class’ work.

At Sprint finalisation, the Sprint Log totalled nine expected tasks. The team observed a **total** **logged** **workload** of **360 minutes** (~7 hours). Four tasks (estimated 1,340 minutes) stood incomplete or uninitiated at the time of sprint closure.

**SCRUM MEETING LOGS**

**12 / OCT / 2015**

5:00pm – 7:00pm

**Location**: UTS Building 11, Game Design Studio Laboratory

**Members present**: Brendan, Deinyon, Jesse, Matthew, Robert

The team identified backlog items and discussed time estimates.

**18 / OCT / 2015**

9:00pm – 10:00pm

**Location**: Online Group Discussion

**Members present**: Deinyon, Jesse, Matthew

The team discussed the game loop and the inclusion of experience. It was decided that due to the unforeseen difficulty of adding attachments that a ‘tech tree’ is out of scope at this point. From this the team decided to just stick with a single currency progression as oppose to one defined by a combination of experience and money.

**19 / SEP / 2015**

5:00pm – 7:00pm

**Location:** Online Group Discussion

**Members present**: Brendan**,** Deinyon, Matthew, Robert

The team discussed difficulty in completing scope items during this sprint due to other class commitments. It was decided that as this sprint is not worth any marks and that there is a week between sprint five ending and the final deliverable being due that members should complete other assignments and work on any uncompleted sprint tasks after those assignments are completed.

Since the sprint items are relatively simple compared to the last few sprints the tasks were deemed feasible within the week after the end of sprint five.

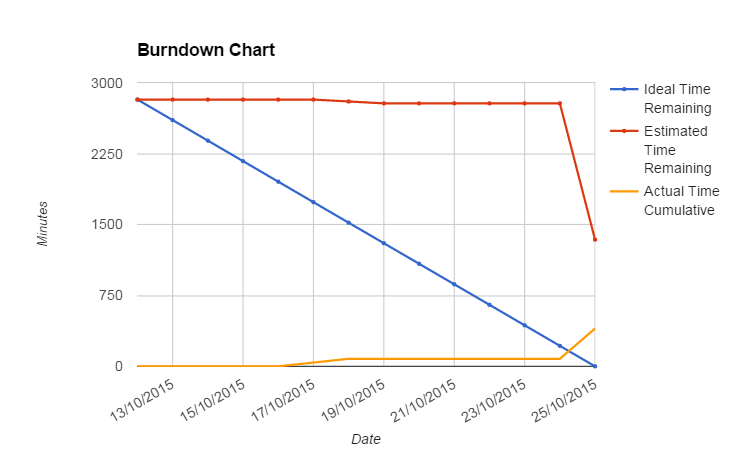
**25 / OCT / 2015**

**Location**: Online Group Discussion

**Members present**: Brendan, Deinyon, Matt, Jesse, Robert

The team discussed the final name for the project and the name “Mowdown” was decided by a vote of 3-2. Other contenders were “Mower Mayhem” and “Lawnmower Simulator 2016.” With the name decided the main menu format and design was discussed and implemented in the project.

**BURNDOWN CHART**



**REFLECTION**

As this sprint was scheduled on weeks 11 and 12 of this semester many other assignments were due on the same day as this sprint; Monday of week 13. Due to the lack of marks assigned to the completion of this sprint it was deemed that members should focus on any other assignments and that any tasks assigned to this sprint must be feasible within the week following the end of sprint five and before the final deliverable due date. While this does limit our feedback from classmates the changes planned in sprint five were minimal and chosen to follow design heuristics that improve player quality of life. These heuristics included the inclusion of a tutorial and a progression system. Lastly Robert McClelland scheduled external play testers during this week so as to get any feedback on the changes in time for the presentation.

While it is bad form to do so little work during a sprint the team endeavoured to ensure that the impact of this unproductive time would be minimized.

**SPECIAL CIRCUMSTANCES**

N/A

**Sprint Backlog**

|  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **User Stories** | **Acceptance Criteria** | **Assigned To** | **Task** | **Estimated Time** | **Minimum Time** | **Maximum Time** | **Actual Time** | **Completed Date** | **Completed By** |
| As a user I want a more attractive main menu | Main menu isn’t just unity buttons | Matt | Main menu isn’t just unity buttons | 130 | 80 | 210 |  |  |  |
| As a user I want the new mower which I know exists because it’s in the files | Implement new mowers | Jesse | Implement new mowers | 550 | 340 | 890 |  |  |  |
| As a developer I want a working build | Fix all the saw, the UI not hovering, The hammer , The mega purple shield | Everyone | Fix all the saw, the UI not hovering, The hammer , The mega purple shield | 550 | 340 | 890 | 60 | 25 / OCT / 2015 | Robert |
| As a user I want a game loop because right now the game is a tech demo | Game sufficiently loops with money for each win | Brendan | Game sufficiently loops with money for each win | 550 | 340 | 890 | 120 | 25 / OCT / 2015 | Robert |
| As a user i want a balanced game cuz the bot is super op | difficulty scaling with bot | Deinyon | difficulty scaling with bot | 550 | 340 | 890 |  |  |  |
| As a rob I want a button for the map hazards | Button asset | Matt | Button asset | 20 | 10 | 30 | 40 | 18 / OCT / 2015 | Matt |
| As a user I want the bot to use every type of attachment | Bot can use any attachment | Deinyon | Bot can use any attachment | 130 | 80 | 210 |  |  |  |
| As a user i want to remove attachments I've already added because i make mistakes | attachments can be removed | Jesse | attachments can be removed | 210 | 130 | 340 | 80 | 25 / OCT / 2015 | Robert |
| As a user I want a tutorial because I dont understand how anything works | Tutorial messages throughout the game | Robert | Tutorial messages throughout the game | 130 | 80 | 210 | 60 | 25 / OCT / 2015 | Robert |

**VERSION CONTROL COMMIT LOG**

commit 2d7774f3f54fe6569c17a96dd5b97fb932c8e61b

Author: robafett <ram\_95@msn.com>

Date: Sun Oct 11 22:55:09 2015 +1100

documentation final version

commit 09421ce28f19dc94176580f8d8ab6a506d8f32ca

Merge: 7ee0911 d32ce63

Author: robafett <ram\_95@msn.com>

Date: Sun Oct 11 22:52:43 2015 +1100

Merge remote-tracking branch 'origin/master'

Conflicts:

Documentation/Sprint Four/Team 4 - Sprint Four Report.docx

commit 7ee09110fbbbc314303188c6277d0d6471ba27a4

Author: robafett <ram\_95@msn.com>

Date: Sun Oct 11 22:51:05 2015 +1100

fixing the doco

commit d32ce63c64edbb11d793b8b4b5a24ca99f54bc3b

Author: Deinyon Davies <deinyond@gmail.com>

Date: Sun Oct 11 22:29:18 2015 +1100

Updated screenshot and commit log

commit bb1d3670778490fda81116552bee02134a088bb6

Author: robafett <ram\_95@msn.com>

Date: Sun Oct 11 22:17:53 2015 +1100

'fixing' multistore

commit 9269675d92e98dd1a2835f02ee001dbc41ab0b11

Author: Deinyon Davies <deinyond@gmail.com>

Date: Sun Oct 11 22:13:19 2015 +1100

Fixed SocketEquipment controller bug

commit 73a8779ca059100b1d7ee6f151317ef7c43fd967

Author: robafett <ram\_95@msn.com>

Date: Sun Oct 11 22:05:09 2015 +1100

collision sound implementation

commit 686d4cdbdfe5ee6aa0567f3cf20f3b1a1383a388

Author: Deinyon Davies <deinyond@gmail.com>

Date: Sun Oct 11 21:58:13 2015 +1100

Updated Sprint Sheet, log, Burndown Chart and introduction

commit 256cb8375d1274474a3c2850147ae284d54ec40e

Author: Deinyon Davies <deinyond@gmail.com>

Date: Sun Oct 11 21:38:39 2015 +1100

Updated documentation

commit a198542f6a382e0979a078d8a0d9d2d2c4c812ea

Author: Deinyon Davies <deinyond@gmail.com>

Date: Sun Oct 11 19:03:33 2015 +1100

Implemented plasma shield functionality

commit 3857e382e803dc1c71e28d0031971657e866a280

Author: JesseWalker11729631 <11729631@student.uts.edu.au>

Date: Sun Oct 11 17:52:22 2015 +1100

Can buy items and see when you buy them

commit 919bcfdebba9819735b5c4f8f0dd8fea0463f8ce

Author: robafett <ram\_95@msn.com>

Date: Sun Oct 11 16:52:07 2015 +1100

woo preliminary sprint four repor

commit 026fc38bec9f523eeef5a172476636eee23dc177

Author: robafett <ram\_95@msn.com>

Date: Sun Oct 11 16:13:28 2015 +1100

a few more tiny changes to the spike prefab

commit 44e05553db94fe2c9b3577d080900a7092a8d8dd

Author: robafett <ram\_95@msn.com>

Date: Sun Oct 11 16:08:53 2015 +1100

kinda directional damage? i caved and used 2 colliders

commit 30b6a415c60c656dcde529caecc43ef0cbdf3863

Author: robafett <ram\_95@msn.com>

Date: Sun Oct 11 15:58:48 2015 +1100

fixed the win screen

commit 9b637d394265ed5e0a6c167a8a9f1209c3cc7643

Author: robafett <ram\_95@msn.com>

Date: Sun Oct 11 15:43:10 2015 +1100

Saw Hazard (its a prefab, chuck it anywhere and it SHOULD work)

commit fad0d89e4e0fbe433095aaa32dd54b16001fae2a

Author: JesseWalker11729631 <11729631@student.uts.edu.au>

Date: Sun Oct 11 15:35:14 2015 +1100

phone store does stuff now

commit 2d115f4b9df255905732aae1130c43ea6bf7299c

Author: JesseWalker11729631 <11729631@student.uts.edu.au>

Date: Sun Oct 11 15:14:49 2015 +1100

small changes to phone

commit 567a6c9b099851e3cbcb6593b43c0e44bf80614c

Author: robafett <ram\_95@msn.com>

Date: Sun Oct 11 15:11:36 2015 +1100

This too for analytics cuz github is slow to realise i changed things

commit 7adda64a9926275ff3bf0a9155560719f3add4d5

Merge: d9344ca d17aeb6

Author: robafett <ram\_95@msn.com>

Date: Sun Oct 11 15:11:10 2015 +1100

Merge branch 'master' of github.com:ddoodm/GameStudioTwo

commit d9344ca61e9518d314c61264195c4c8ba878a7a9

Author: robafett <ram\_95@msn.com>

Date: Sun Oct 11 15:11:01 2015 +1100

Fixed Analytics again (its just as useless as be4 but watever makes cat happy (except 2d))

commit d17aeb6f5fc1d95d54aa3cd082d961a1c70724e6

Author: Deinyon Davies <deinyond@gmail.com>

Date: Sun Oct 11 12:27:01 2015 +1100

AI makes decisions on which side of the player it should attack

The FSM bot AI will attempt to navigate to the player's most vulnerable

socket. The AI does not yet consider its own socket equipment.

commit 55ffa9a930f3b56afc5cd81dc0997a05b3f5bb18

Author: JesseWalker11729631 <11729631@student.uts.edu.au>

Date: Sun Oct 11 04:58:43 2015 +1100

Made a few changes to the phone and other things I can't remember anymore

commit 5d7cb5b312a6eeaab91c3893beb1adff08e8b7f3

Author: JesseWalker11729631 <11729631@student.uts.edu.au>

Date: Sat Oct 10 18:35:18 2015 +1100

Items spawn on all scenes, code cleaned up (works fine <.<)

commit 95a25f2bb54fca03085b963d1dbd6bb7fb7d53e4

Author: Deinyon Davies <deinyond@gmail.com>

Date: Wed Oct 7 20:32:46 2015 +1100

Improved AI socket logic

commit e27bebd076f0b1637eacaeb41d3ec688ce4ee8a2

Author: robafett <ram\_95@msn.com>

Date: Wed Oct 7 14:37:56 2015 +1100

flipper can die (its hard tho) Booster is too boss to get broke dough

commit a2626c53c877d5e41468c0d9f1d7abd4b34ed0e9

Author: robafett <ram\_95@msn.com>

Date: Wed Oct 7 14:18:33 2015 +1100

wooo spinner can be used

commit 7847828101407d2c732fd175cc0bfdfeae4dadad

Author: robafett <ram\_95@msn.com>

Date: Wed Oct 7 13:54:57 2015 +1100

made the shield weigh less, and block damage better. Hp TBD

commit ff8adaf92ac3d6da2cd6fad5008e31054d05ab76

Author: robafett <ram\_95@msn.com>

Date: Wed Oct 7 13:50:11 2015 +1100

the saw spins (cant be used yet tho)

commit 9d84933b73be3930f24d6f80172d92760889b0ac

Author: robafett <ram\_95@msn.com>

Date: Wed Oct 7 13:24:43 2015 +1100

hammer swings

commit 46fd12a01be3be83c417db325b0bbe0747ea747d

Author: Matthew Carver <matthew\_carver@live.com>

Date: Wed Oct 7 13:08:06 2015 +1100

Phone for Jesse

Phone model for the workbench

commit 65bdd295e96b82a3462b7f3eb582579d6aabc1be

Author: JesseWalker11729631 <11729631@student.uts.edu.au>

Date: Mon Oct 5 13:24:00 2015 +1100

Spooky Plasma Shield

commit ea7a1d204df6591066d9169546c4b9a5946d00ed

Author: JesseWalker11729631 <11729631@student.uts.edu.au>

Date: Mon Oct 5 00:17:54 2015 +1100

All Items can be spawned in scene 1

commit 2a3765bcbe54caacf39fee9c9918b071a55c6c2d

Author: JesseWalker11729631 <11729631@student.uts.edu.au>

Date: Sun Oct 4 18:31:36 2015 +1100

Added all models into scene and fixed highlighter code

commit 234e9f571de709ecb2c9f4a4f56a0086fb821bc4

Author: JesseWalker11729631 <11729631@student.uts.edu.au>

Date: Sat Oct 3 03:40:08 2015 +1000

Put a Model Into The Store Scene

commit bb3fe9c69bc06f7ae2e933a60a58d11cdb182314

Author: Deinyon Davies <deinyond@gmail.com>

Date: Sun Sep 27 22:13:47 2015 +1000

Implemented Plasma Ball HLSL Shader. In BS3

Finished the plasma ball shader & material, but not the functionality.

Check out Battle Scene 03 (Arena) to test.

commit 3b3b059d9578e2924e6fbb2655e1e7179dd25dfc

Author: Deinyon Davies <deinyond@gmail.com>

Date: Sat Sep 26 12:08:31 2015 +1000

Fixed WebPlayer bug, Impulse collision and x86 Build

commit f708cc9422eec8384e5bf57460cc2daa745f44da

Author: robafett <ram\_95@msn.com>

Date: Thu Sep 24 18:04:34 2015 +1000

Fixed the store bug, flippers now face the right way and dont activate, shit stops complaining

commit 917a4faa48ab4622b0aa3d55f1599433a4246d94

Author: JesseWalker11729631 <11729631@student.uts.edu.au>

Date: Thu Sep 24 17:43:47 2015 +1000

git will die

commit f01ffbd711c78e08eebd289f3eb6dbd2a872697d

Author: robafett <ram\_95@msn.com>

Date: Thu Sep 24 17:43:43 2015 +1000

Fixing bug 1 with mutliplayer (controller 1 should now be top screen again)

commit 89947c993ffbce868cfa8b2f801a347a9d8ab1e9

Author: robafett <ram\_95@msn.com>

Date: Thu Sep 24 17:24:16 2015 +1000

Fixed bug 2 of multiplayer, items being spawned incorrectly on player 2

commit ababd5781ff8231662795e3b59cd53bb0e10faae

Author: Deinyon Davies <m@ddoodm.com>

Date: Thu Sep 24 11:46:24 2015 +1000

Update README.md

Added link to web build

commit efffe6f30ea76a2ade7ea853b676cb998a0d0a31

Author: robafett <ram\_95@msn.com>

Date: Thu Sep 24 07:14:55 2015 +1000

Fixing the loop

commit 02bbda6870a330b862917c16933364f9b9a0e116

Author: robafett <ram\_95@msn.com>

Date: Thu Sep 24 06:55:17 2015 +1000

Persistent Items thru scenes, spike is in the wrong place

commit d74e9b3c881b73bf4bc82b74b09326bf089dc3b0

Author: robafett <ram\_95@msn.com>

Date: Wed Sep 23 20:22:11 2015 +1000

stopping the itemSocket from complaining

commit 21ea0093f31fb7712b2802ad151a2988cc93b3fb

Author: Matthew Carver <matthew\_carver@live.com>

Date: Wed Sep 23 17:47:04 2015 +1000

Plasma Generator and the Aero Brace

PlasmaBase > PlasmaCells > PlasmaTopper

AeroFrontBrace

AeroRearBrace

AeroSideBrace

commit 9bfb7344b560d87c1d1bf7acddfa95dda90beae1

Author: Deinyon Davies <deinyond@gmail.com>

Date: Wed Sep 23 11:35:22 2015 +1000

Almost fixed issue with weapon attachments in the store.

Need to fix incorrect rotation of flipper attachment.

commit 75de4ac6fa3bf76188cc0233544c67968f0b8041

Merge: 9b296e6 0f59e68

Author: robafett <ram\_95@msn.com>

Date: Wed Sep 23 10:32:21 2015 +1000

Merge branch 'master' of github.com:ddoodm/GameStudioTwo

commit 0f59e68e2a54850502b6eeeef4bdf4c5ae668df4

Author: Deinyon Davies <deinyond@gmail.com>

Date: Wed Sep 23 10:30:02 2015 +1000

Fixed issues with enemy AI not draining its energy

commit 9b296e62b2a849a41b7ce30c80625db2ad5b19ba

Author: robafett <ram\_95@msn.com>

Date: Wed Sep 23 10:03:12 2015 +1000

woo multiplayer (no attachment persistence)

commit bc8916a65904ee3d17292863e1a326c3abc5f653

Merge: 80c8ed1 b9ef2a4

Author: robafett <ram\_95@msn.com>

Date: Wed Sep 23 08:29:35 2015 +1000

Merge branch 'Rob's-Multiplayer'

commit b9ef2a458901ad55a08af9875a103d15d2b7bf1f

Author: robafett <ram\_95@msn.com>

Date: Wed Sep 23 08:29:01 2015 +1000

Things can be highlighted with controllers (color can be changed too)

commit 0b3802ade60d453208b96b1fd385b06fed8fe5f8

Merge: aae1172 80c8ed1

Author: robafett <ram\_95@msn.com>

Date: Wed Sep 23 07:20:58 2015 +1000

Merge branch 'master' into Rob's-Multiplayer

commit 80c8ed19e49b36bd2cf925cdc6198f74f5ef05a9

Author: Deinyon Davies <deinyond@gmail.com>

Date: Tue Sep 22 21:23:19 2015 +1000

Flag model & partial implementation, damage 'impulse' collision test

Modelled and partially implemented the flag. It is not yet an

attachment.

commit 2fdc8dc9f17e510bb7031aa1ffe24d4f9c449949

Merge: d43c746 aae1172

Author: robafett <ram\_95@msn.com>

Date: Tue Sep 22 10:14:21 2015 +1000

Merge branch 'Rob's-Multiplayer'

commit aae1172baa42f2d50170bfba2ff8317f27af0d95

Author: robafett <ram\_95@msn.com>

Date: Tue Sep 22 10:13:44 2015 +1000

Multiple Controller Support

commit d43c7460a43350789f56158d04f8e078b44782c3

Author: robafett <ram\_95@msn.com>

Date: Tue Sep 22 07:11:23 2015 +1000

plz merge well

commit 8a5a112852088e2dfa92e9aaeb312beca024a459

Merge: 420754e bc9a292

Author: Deinyon Davies <m@ddoodm.com>

Date: Mon Sep 21 20:22:15 2015 +1000

Merge pull request #7 from ddoodm/FSM-AI

Weapon AI and Socketing Restructure

commit bc9a292513d968a9ffe6863a37d99121657d2062

Author: Deinyon Davies <deinyond@gmail.com>

Date: Mon Sep 21 20:21:29 2015 +1000

Fixed merge failures

commit 92048c81574e0d289d88563e3842c9a89c2e71d6

Merge: 84ac821 420754e

Author: Deinyon Davies <deinyond@gmail.com>

Date: Mon Sep 21 20:02:33 2015 +1000

First attempt to merge branch 'master' into FSM-AI

Conflicts:

GameStudioTwo/Assets/Prefabs/VehicleBot2.prefab

GameStudioTwo/Assets/Prefabs/VehicleV2.prefab

GameStudioTwo/Assets/\_Scenes/BattleScene03.unity