"You Might Dig"
Construction Phase Status Assessment

1. Consideration against aims of construction phase

Achievement of functional targets set out in project plan

All the functional targets we set out to achieve in the re-submitted project plan from LCOM were met by the end of the construction phase with some new targets being added during the phase.

The project plan can be found [here on version control](#) and individual iteration plans can be found [here](#).

Achieved

- [Completed in C2](#) - Implementation of "Change User Settings" to support recommendation engine
- [Completed in C4](#) - Implementation of recommendation engine

The majority of our *individual* features were implemented during Elaboration phase.

Some of the functional targets were added after submission of LCOM, all were completed:

- [Added C1](#) (Objective 3 & 4) - Creation and implementation of 3 additional gatherers to fetch games for Playstation, Nintendo and Xbox
- [Added C2](#) (Objective 3) - Administrative use cases were added at the suggestion of Jim
    - Configure genres (blacklisting and hiding various genres)
    - Configuring which characteristics define a genre
- [Added C3](#) (Objective 1) - Expansion of the *Browse Games* use case to include filtering and sorting of games based on genre, rating, etc.

Unachieved

None of the goals initially set out in the project plan submitted for LCOM (or the goals added during the phase) were ultimately unachieved. Some delays occurred which are covered in section 2 of this document.

Alpha UAT Testing

UAT testing was designed and performed for all use cases during development and can be found [here on version control](#).

Two of the UAT scenarios had failures on initial runs in the production environment:

[Scenario #4: Change User Settings](#): When a user changed their email address to one already associated with an existing account, the system did not raise any issue. This was fixed in commit [f672ddb](#)

[Scenario #6: Configure Genre & Characteristics](#): When updating whether a genre is blacklisted or hidden, the database seemed to not be updated. This was due to the fact that the system was inefficiently iterating over every genre and every game belonging to that genre to set the blacklisted member - which on the production environment with over 5500 games and 75 genres resulted in an extremely slow update that would potentially not even complete. This was fixed in commit [810cb14](#) by performing the update purely on the database server, running only 4 update queries (rather than potentially thousands as well as having to recursively iterate over all genres and their games)

Beta UAT Testing Preparations

Our beta testing preparations involve a [user manual](#) and an easy to use [google form](#) with no true UAT script to follow, instead opting to give the testers several general instructions which relate to use cases, such as "Search for a game" and asking if they were able to accomplish the task, how difficult they found it, and asking what issues they encountered or for any suggestions they may have to improve the system.

Testers will not require any orientation or training involving the system and as such will be discouraged from using the user manual unless they require it (though should they require it, the manual **is** ready for presentation) - because the scope of the system is to be easily accessible without any prior experience with the system.

2. Consideration against objectives of each iteration

Construction 1

Plan - Evaluation

Goals

1. Somer - Implement *Change User Settings*
2. Unassigned - Design and perform UAT for *Change User Settings*
3. Erin/Somer - Integrate proof of concept PS4 and Xbox One gatherers into the system
4. Erin - Design and integrate WiiU/3DS gatherer

Goal #1 was partially complete however not completed by iteration close with a reported 1 hour estimated work remaining.

The remainder of the goals were incomplete with the exception of a proof of concept for goal #4's WiiU/3DS gatherer being reported though no commit to version control made at that time

Issues

Issue	Impact	Resolution
An iteration plan was not complete until the day before the close of the iteration and was composed by Somer at the last minute	the entire iteration was poorly planned and communicated	Somer composed the C2 iteration plan on time
The group communicated extremely poorly after the mid-year break	The iteration was poorly communicated and as a result essentially had no plan at all	Shailesh engaged the team and organised a meeting after noting our communication was so poor
The entire group performed little/no work	The project schedule is pushed back	**None.** (until end of C2)

Construction 2

Plan - Evaluation

Goals

1. Somer - Finish Implementing Change User Settings
2. Hugh - Design and perform UAT for Change User Settings
3. Somer - Begin design and implementation of Configure Genre Characteristics
4. Hugh - Design and perform UAT for Configure Genre Characteristics
5. Erin/Somer - Integrate proof of concept PS4 and Xbox One gatherers
6. Erin - Integrate WiiU/3DS gatherer
7. Unassigned - Update class diagrams
8. Unassigned - Design supporting structure for recommendation engine

The iteration plan was once again poorly planned with Somer writing the plan with no ironclad assignment of tasks and the majority of tasks were untouched.

Issues

Issue	Impact	Resolution
Many work items from the previous iteration were carried over	Extra workload for this iteration	No resolution - most work items remained incomplete
Somer mistakenly altered the iteration dates in the project plan to match oversight meetings	Minimal	The dates were changed back
Only work items completed were by Somer	Schedule pushed back	See below
Team-wide lack of communication	Another poorly communicated and executed iteration	During the oversight meeting Jim issued an ultimatum to Erin and Shailesh, and a warning to Hugh

Construction 3

Plan - Updated item assignments - Evaluation

Goals

1. Hugh - Expand *Browse Games* use case to allow sorting and filtering
2. Hugh - Design and perform UAT for *Change User Settings*
3. Shailesh - Design and perform UAT for *Configure Genre Characteristics*
4. Erin - Integrate proof of concept PS4 and Xbox One gatherers
5. Erin - Integrate WiiU/3DS gatherer
6. Somer - Update class diagrams
7. Somer - Design supporting structures for recommendation engine
8. Somer - Expand upon initial implementation of recommendation engine

The iteration following Jim's ultimatum was much better planned and communicated with a meeting being held to assign work items

Most major work items were complete or required little work for the following iteration

Issues

Issue	Impact	Resolution
Many work items from the previous iteration were carried over	Extra work items for this iteration	A great deal of the work items were completed or had very little overflow into the next iteration
Schedule of recommendation engine pushed back to C4	Behind initial project plan	C4 was planned as a contingency iteration and as such the issue was not major at all

Construction 4

Plan - Evaluation

Goals

1. Hugh - Expand *Browse Games*
2. Somer - Finalise implementation of recommendation engine
3. Erin - Integrate WiiU/3DS gatherer
4. Shailesh - Design and perform all required UATs (Awaiting completion of #1 for one UAT)
5. Shailesh - Update/add use case descriptions
6. Somer - Update class diagrams
7. Erin/Hugh - Create user manual for beta testing
8. Shailesh - Ensure all UATs are successfully executed

Almost all work items besides final housekeeping and submission of IOCM were complete, and a C5 was added, shortening the planned length of Transition phase iterations and giving breathing room for IOCM submission.

Issues

Issue	Impact	Resolution
A large number of work items (at the beginning of the iteration)	Extra work for the team during this iteration	**Most** work items were small tasks and as such were easily completable before the end of the iteration
Browse Games use case continued to the next iteration for the second time	Shailesh continued to have to wait for its completion in order to design the UAT for it	Shailesh had other work items to complete, though the delay was still concerning
The Change User Settings UAT had a failure in one of the scripts	An error needed correcting	The error was corrected (see section 1, Alpha UAT Testing for a link to the commit)

Construction 5

<u>Plan</u> - <u>Evaluation</u>

Goals

1. Hugh - Finish expanding *Browse Games*
    a. Shailesh - Design and perform UAT
2. Erin - Revert production version of application to no longer assign new users staff flag
3. Hugh - Split user manual into 'user' and 'admin' documents
4. Erin - Produce a google form for beta testers to submit feedback
5. Entire Team - Project status assessment (before 15th of Sept)
6. Somer - Update team wiki for IOCM submission

Most goals this iteration were housekeeping and wrapping up everything to ensure IOCM is submitted and that the project is ready for beta testing

Issues

Issue	Impact	Resolution
Browse Games use case not implemented due to errors until the day before IOCM submission	Shailesh had to wait until the completion of *Browse Games* in order to write and perform the alpha UAT	Shailesh completed the UAT on the day of IOCM submission
The *Configure Genre & Characteristic Settings* UAT reported failures	Some errors needed to be corrected	The error was corrected (see section 1, Alpha UAT Testing for a link to the commit) and the UAT performed again, passing this time.
Somer didn't notify Hugh about the fix to *Change User Settings* and didn't formally run the test script again	The test script needed to be executed and the results noted	Hugh performed the test script again and with the fix, the system passed

3. Concerns/Deviations and Remedies/Solutions

A major issue this phase has been communication and completing work items in a timely manner (ie not leaving them to the last minute) or at all.

After returning for the mid-year break, the team rarely communicated and Somer composed the initial iteration plan extremely late (three days before the end of the iteration) after Shailesh prompted the team and noted that some work needed to be arranged. The plan was made available to the rest of the team though no work items were assigned beyond initial assignments made by Somer.

Somer should have communicated more effectively when composing iteration plans and ensured all team members understood their tasks/assigned available work items to themselves.

The entire team should have been meeting **at least** once a fortnight outside of the oversight meetings in order to plan the iteration and assign work items. This was performed after the end of C2 when Jim issued 2 strikes to Erin and Shailesh, however should have been done before then.

We should have stuck to the unified process and referenced our team charter where a 3 strike system was laid out. And the issue of work items not being complete should have been raised by Somer by the beginning of C2 and if issues continued a strike given to team members continuing to not.