



March 20-24, 2023
San Francisco, CA

An Important Conversation about Conversations

Covering:

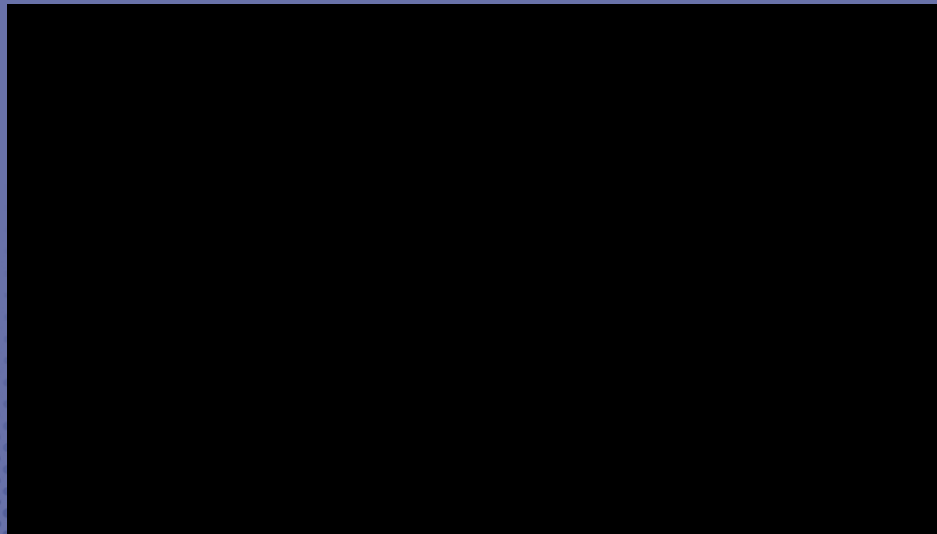
Team

Planning

Production

Post Production

Success!



#GDC23

Acknowledgement of Country

To start, Wayward Strand was made on the lands of Wurundjeri and Bunurong people of the Kulin nation, and is set on Bunurong country, and we pay our respects to Wurundjeri and Bunurong elders, past and present.

We also want to acknowledge that we're all meeting on the unceded lands of the Ramaytush Ohlone (rah-my-toosh oh-low-nee). People and pay our respects to the Ancestors, Elders and Relatives of the Ramaytush community.

We encourage you to visit **ramaytush.org**, where you can find out more about the community, as well as donate, and to also form relationships with First Nations groups in your own communities as part of your game development process.

The Team - *Creating an environment for radical collaboration!*

Audio:

Maize, Tfer, Allison and Kyra

Direction:

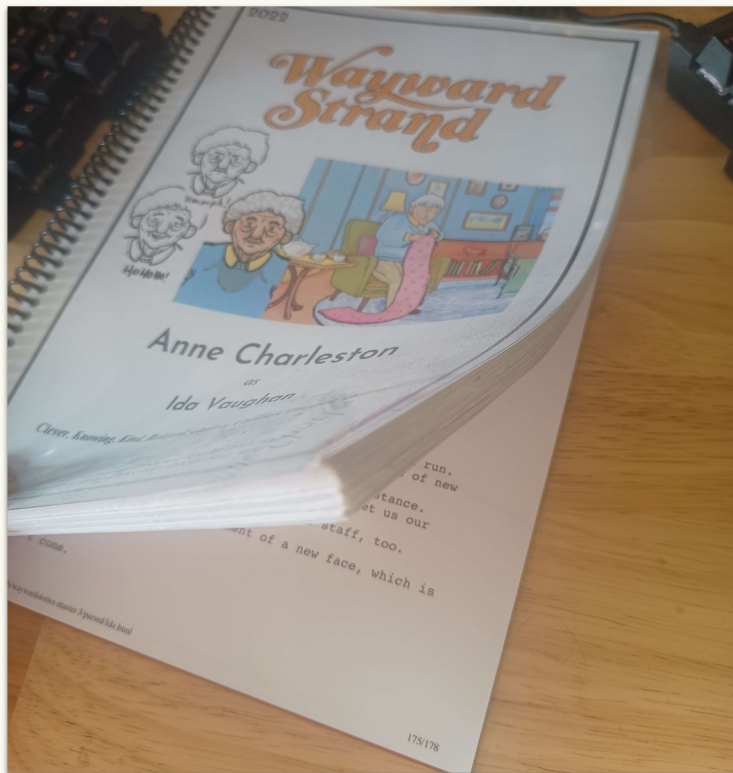
Georgia and Jason

Tech support:

Thom



The Challenge: A mountain of dialogue...



- 14 characters
- Cast in different cities
- Scripts up to 2000 pages each

So, how do we deal with that?



The Conversational Goals

- Conversational and natural tones for each interaction in the game.
- Consistency of audio recording quality across actors and studios, and time.

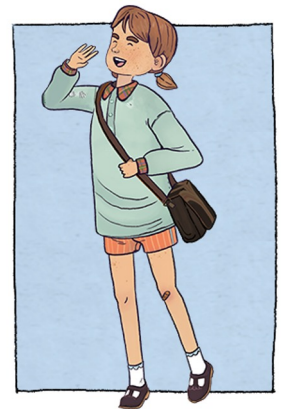
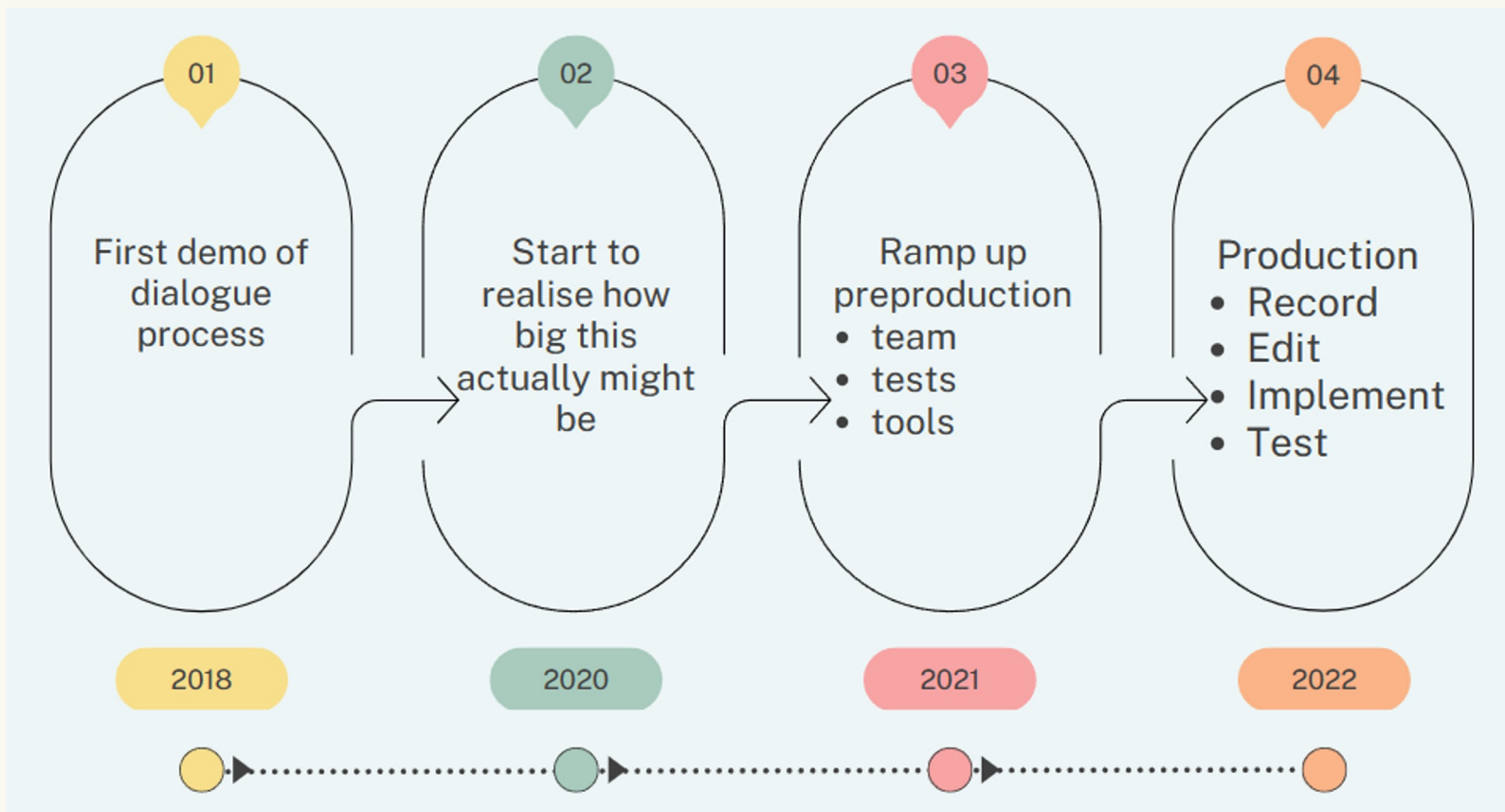
Above all:

- Comfortable recording experience for actors given the complex non linear nature of the script.



Round one of recording in 2018!

The Production Timeline



Team - *Keys to creating an environment for radical collaboration*

- Acknowledging specialist skills bases of team members.
- The importance of onboarding.
 - overcoming distance and team size.
 - teaching and practice
- Effective knowledge transfer through
 - communication and rehearsal
 - establishment of vocabulary
 - "Sanity checks"
- Iteration - take the time to follow through with it!



Why are we doing it this way?

We have to do it this way because there are 20,000 lines of dialogue!
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Onboarding plan - *sanity checks*

Hullo Allison!
Here I hope to outline our onboarding together!

Getting Started:

- Steam key for Allison: [6ELRB-TOKZF-PYMBG](#) - start downloading at start of the day. Not a big download. Dev branch password is [REDACTED]
- Slack (invite Allison)
- Git (invite Allison) - very big download *think* about when you want to do this. It currently sits at ~25gb
- Google Drive (invite Allison)
- Jira (invite Allison)
- Confluence (invite Allison)
- Wwise (add Allison to *project*, or just pass *over license key*?)
- Writing Wiki
- Anything else?

Git will be a BIG download. So the next thing we'll do is just play the game a bit!

Wwise version: 2019.2.5.7349
Unity Version: 2019.4.25f1

Playing the game and talking about team values

- Discuss the three day arc of the story
 - Our values as a team
 - Consultation and narrative
 - Disability Accessibility
 - Age Accessibility
- Release Date spreadsheet: [Release Date Calculator](#)

Areas of sound:

- Animation/Character/Movement SFX - Allison
- Prop SFX - Allison
- UI SFX - Maize
- Music - Maize
- Bookends (???) - Maize

Documentation:

Audio folder:
<https://drive.google.com/drive/folders/0924nv9UJEGIN211Cm56RUCFGTz0?resourcekey=48m8H4KIEGfChkDo30urG&user=sharing>
Has all kinds of audio things including our spreadsheets, demos and recordings, stuff for publicity, old stuff

Foley list: [AUDIO - Animation List](#)
Music list: [Music List](#)

Jira: [Projects](#), [Jira \(atlassian.net\)](#)
Jira is for task tracking

Confluence: [Wayward Strand - Confluence \(atlassian.net\)](#)
Confluence is for documentation. Mostly for us it is used for playtesting notes, which then get transferred in to Jira tasks

The journey of a sound:

1. Collate materials
 2. Record materials
 3. Sound is made in DAW
 4. Sound is put in Wwise
 - a. Given event
 - b. Put in container and made functional
 - c. Assigned to soundbank
 5. Sound is triggered in Unity
 6. Sound is tested to see if playing correctly
 7. Sound is done!
- You may want to split your days/weeks in to 'make sound and put in Wwise' and 'implement sound in to Unity'. So you have 'Wwise' days and 'Unity' days

Brainspaces:

- There's -three brain spaces we will find ourselves in
- Recording

- Making our sounds with our DAW
- Exporting our sounds from our DAW, and putting them in Wwise
- Implementing Sounds in Unity

Here depending on *vibe*, we will start looking through Wwise!
I think that we should *try* get Allison comfy making some simple *behaviours* suitable for foley.

Animation sound implementation in Unity can be for another day, when we are ready to tackle it!

At 2:30pm (but probably late) Maize has a quick Dr appointment. Hopefully this is at the end of our Wwise lesson, and Allison can have some time playing the game and noting some thoughts. Or playing with Wwise and getting comfortable with the pipeline. You could do this with clothing sounds. Or prop movement sounds.

Another thing Allison can get started on, is looking at the animation list, and refactoring it to be audio relevant. Character movement can be simplified from what is in the animation list.

Another thing could be to write a small bio and intro about joining the team, for our newsletter/publicity.

At 4pm we have the team meeting. So Allison should be set up with Jira and Confluence by this point, so she can take playtest notes. Even if it isn't clear yet how they get turned into tasks (next topic)

Last thing to discuss is what days work best. I think it's likely Thursday/Friday would be good, so that the team meeting at the end of the day can be attended.

Process of a task:

- Bugs go straight in Jira after sanity check, and checking if it already exists in Jira
 - Sanity check needed to see if it is a part of a larger task or who it involves (probably less needed after a while, but I think it's good)
- New sound to 'make' goes in spreadsheet and then in Jira. Sound also needs accompanying 'implement' task for Unity side which is 'blocked by' the making the sound task
 - A sound is 'made' once it is in Wwise and has an event *trigger it*.
 - A sound is 'implemented' once it is implemented in Unity
- Music tasks may differ slightly as 'implement' is more of a verification check (at the moment. Later it will be a new timeline implementation)
- Review sounds and work with Maize. Mark done on spreadsheet
- Try to mark tasks as 'Done' in Jira also by Friday at the end of the week. Or ideally as you go along.



Dress rehearsal!



The keys to success: Dropbox + Sheets

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[illegible]

Engineer Training!

WS VO Studio Guidelines

Wayward Strand has over 25,000 lines of dialogue. While most is being recorded in Melbourne, we also have actors being recorded in Sydney, Vienna, and London. It's incredibly exciting, but also means consistency is key to making our time in post as smooth as possible.

Physical set up:

U87 microphone with mesh pop filter (we are using a Shure filter. Not metal) Close to (or at) 0 natural sound, for the actor placed around 70cm away. This might be a bit different in your booth have made the decision that noise floor is easier for us to deal with in post, than preamp gain important to note that we are going for a really naturalistic sound. This is not close mic'd, narration style voiceover.

We have found that the metal music stand that we put the script on is resonant, and to the actor's heels should be. And also sound check for a seated position, to all seated at will.

Check pickup pattern of the U87 is Cardioid

Here is a [sample clip](https://drive.google.com/file/d/1urxpz5TxuYvnh4hl_6JOCmH5Vg7t/view) to match:

It's important that there are **no effects in the chain** eg. eq or comp with multiple studios.

Protocols set up

This section accompanies a video I have made, demonstrating one character here:

<https://drive.google.com/drive/folders/1DAV40C>

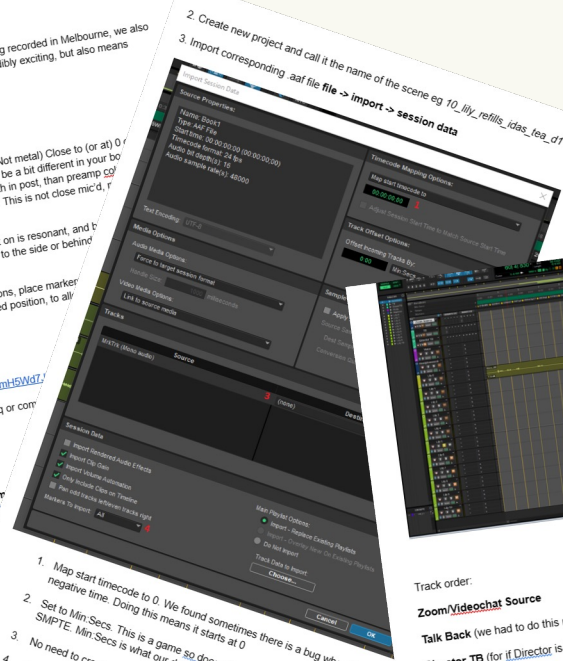
If you pass over your studio template, we can set up a session of one character here:

<https://drive.google.com/drive/folders/1DAV40C>

We use a tool called Edimarker to convert markers on the timeline, for help with **prog** are not strict. They come from how long add time between them for clarity, that

We have found the best way to then

1. Open your studio **Protocols** tem



1. Map start timecode to 0. We found sometimes there is a bug where it imports negative time. Doing this means it starts at 0
2. Set to Min Secs. This is a game so doesn't have a constant frame rate, and doesn't SMPTE. Min Secs is what our data has
3. No need to create a new track
4. Import all Markers

Track order:

Zoom/Videochat Source

Talk Back (we had to do this manually to make it work with zoom)

Director TB (for if **Director** is in person, and needs an extra mic. Optional)

Voice (Actor in booth). Name it the character, so next tracks are **name** AND **SO CLIP**

Headphone Monitor (this is for **play back** to headphones, and not main out. Optional **name 0...** This is the first reading of the scene. We recommend that you create 10 so you have room to drag the clips down in 10 position.

Recording Process

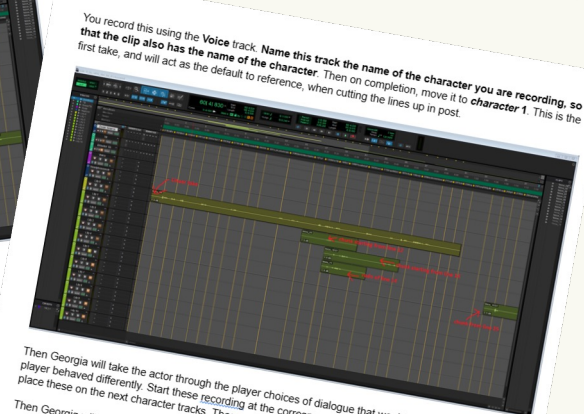
As this is a videogame, the script is non-linear.

Here, the dashes correlate to player choices or past action.

We have found we get a better response and understanding from the actor script once in a linear fashion. Just choosing the first option in each scene

director Georgia Symons helps the actor annotate a linear path.

<https://drive.google.com/file/d/1Ku552Aqz44SbbAicX6PUM5Qz7w/view> highlighted in green and labelled 1.



You record this using the **Voice** track. Name this track the name of the character you are recording, so that the clip also has the name of the character. Then on completion, move it to **character 1**. This is the first take, and will act as the default to reference, when cutting the lines up in post.

Then Georgia will take the actor through the player choices of dialogue that would have happened had the player behaved differently. Start these recording at the corresponding marker/line number. Once recorded, place these on the next character tracks. These are now the default for those player choices.

Then Georgia will take the actor through any "pickup". Start the recording of each redo from the marker/line number that is the focus. While the actor may want a run up, we will still record from the relevant marker number so that we can easily see what we are looking for in post.

As we start to stack alternative takes, we can see that in post we will be working line by line, and working bottom up to see the latest takes per marker/line.

Along with this, assistant director Jason Bakker who will be attending the voiceover direction with Georgia Symons, will be noting **CLIP Name** and the **instance** of the line, if it is not the first one. eg. If the actor tries out line 14 three times, Jason's note may say "Lily 3, instance 2" as the preferred take. You could also clip this take during recording, but we have found that this is disruptive to the flow of the session.

Here is a sample of Jason's notes, so you can see:

https://docs.google.com/spreadsheets/d/1u0bealNzGB8xuE_NhU-Tzk-IT4noXaJ/edit?usp=sharing&ouid=110119165254988721981&nof=trun&sd=true

Notes may be shortened to just 'x,y'

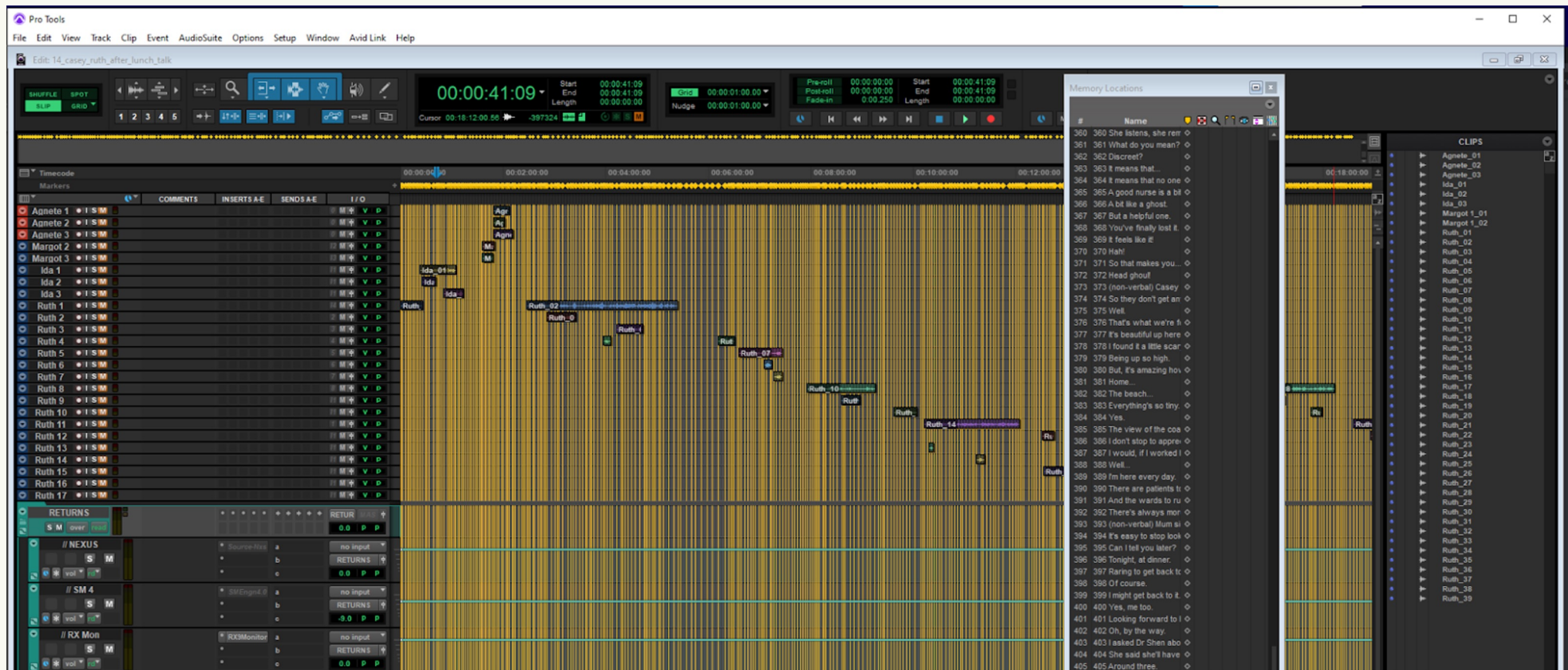
Thank you!

We have over 25,000 lines of dialogue to sort through, all with multiple takes. We really appreciate you keeping the **Protocols** sessions **organised**, and communicating with Jason relevant clip names as the instances and takes are decided on

Engineer Training!



The integration hero - EdiMarker! 💖

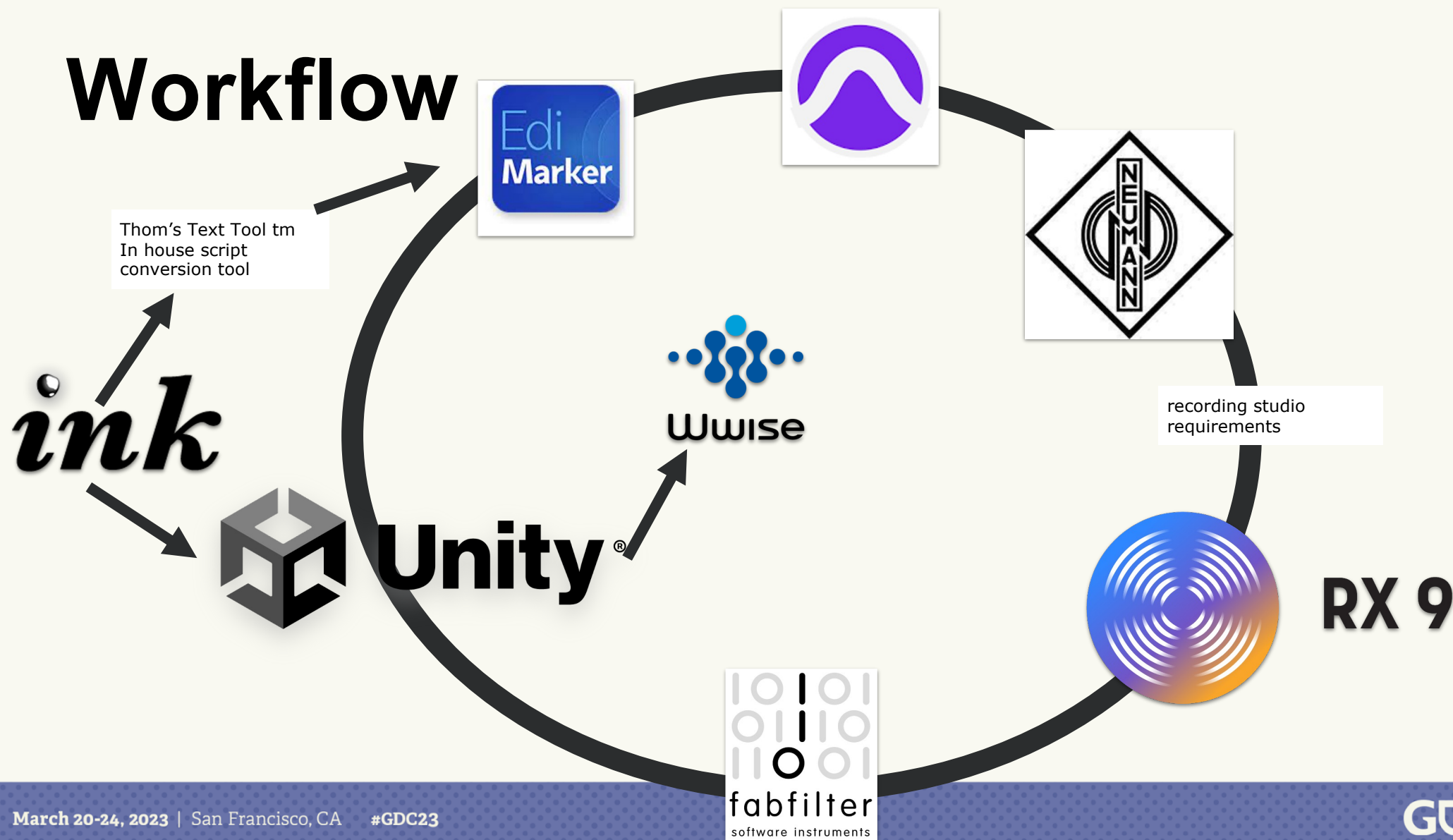


Post Production and Implementation

- *The relay race to the finish line*

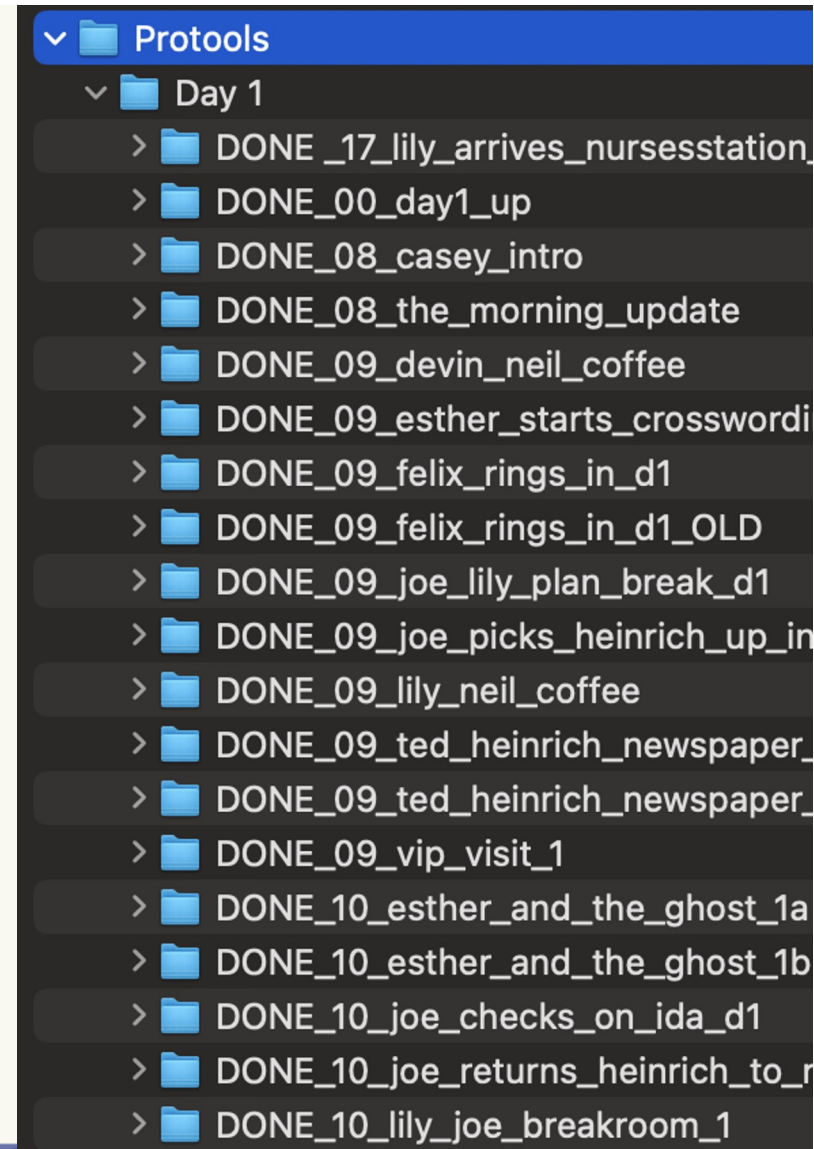
- Sound Editing -
 - Workflow design, management, and evolution.
- Geek level engagement about sound tech.
- Real time mixing, and impact of bugs on mixing and game play, automated v manual testing.

Workflow



Dialogue Editing

- Slicing
 - choosing the right take
 - identifying recording issues
- Editing
 - Shortcuts
 - Character based presets
 - Denoise, De-reverb, Loudness, Eq
- Exporting
 - naming
 - error management



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QA - so how did we do?

... Out of 800 scenes, we estimate around 5% of them had errors...

- Automated QA can only rely on files existing or not
- Manual QA for anything that takes listening
- Fix can exist in wav file, or in script text



Key takeaways -

- Set up your team for success and keep supporting them!
- Over communicating is better than under communicating
- Practice and iterate on processes - if there is something wrong fix it once!
- Buy in from multiple departments, will allow you the tools you need to scale and be flexible.

Thanks for listening!

- We are here pitching our next game...
- We are interested in discussing VO services.
- Questions?