Preliminary Risk Assessment	Severity	Likelihood	Description	Mitigation
Production Risks	**Severity**	**Likelihood**	**Description**	**Mitigation**
Staffing				
Too Many Designers	Moderate	Moderately Likely	We have 4 designers, which could make it difficult to coordinate our efforts and make a coherent game	The designers will always communicate about which parts of the game or documentation they're working on, and will frequently discuss each designer's strengths and weaknesses to best use their skills.
Only One programmer	Low	Low Likelihood	We only have one programmer, which may limit our in-engine abilities	Some of the designers will act as programmers when needed, and all team members will make an effort to work in engine whenever possible to make it easier on the programmer.
Only One artist	Low	Moderately Likely	Art has to be well researched and created in a short timeframe	Complete all reseacrh before the greenlight to create assets and simplfy where ever possible.
No Producers	Moderate	Very Likely	We have no producers on our team. This will make the production doucuments difficult since no one on the team is familiar with them.	The team will have to work collaboratively to communicate actively and ensure all of the work is done when it needs to be done. We will pass required producer documentation to whoever feels most comfortable doing it.
Project Management				
Unskilled in Agile	Low	Moderately Likely	Our team is relatively unskilled in Agile develonpment, which may make it more difficult to use user stories and tasks.	We will all put in our best efforts and ask for help with stories/tasks when we need it, and go to production tutors when we need more help.
Scheduling Conflicts	Low	Low Likelihood	Team members have busy or inconsistent schedules.	Plan meetings well in advance and plan extra slots in the event a meeting has to be moved.
Financial				
No Outside Tools	Low	Moderately Likely	We have no access to funds for the game, meaning we will be unable to purchase any assets or additional tools for development.	We will make sure all of our art and game plans are of limited scope, to ensure our team can complete all of the work without too much outside help.
Limited Access to Research	Moderate	Moderately Likely	We have no funds to allocate to research, meaning we will not have access to any informational databases outside of the ones provided to us by the school.	We will make the most of our school e-library and in person library, as well as digital resources and access to any core professors' information in order to make sure our research is complete.
Tools				
Git	Moderate	Moderately Likely	Many members of our team are still inexperienced with Git and its GUIs, which may lead us to merge and collaboration issues.	We will talk to our programmer whenever we're having Git issues, and bring those issues to tutors if they're things our programmer can't solve.
Unity	Moderate	Low Likelihood	Some of our team members are not completely used to Unity development.	We will use the design tutors and online resources extensively, and aim to have the people more comfortable work in engine more often.
Redmine	Low	Low Likelihood	Some members of our team are not used to using redmine for project management.	Team members will communicate with the rest of the team whenever they have issues so we can all work through them together, using outside resources if needed.
Art and Animation	**Severity**	**Likelihood**	**Description**	**Mitigation**
Creative Risks	Moderate	Very Likely		
Amount of Assets	Moderate	Very Likely	The number of assets for this game can easily become overwhelming and out of scope	Consolidate assets and find ways to reuse assets as often as possible. Also limit designers ideas to expand the game to keep art within scope.
Undefined Regions	Moderate	Very Likely	The regions that will be used to create puzzle pieces are largely undefined.	Prioritize research about cultural landmarks and areas of interest before getting too far into the project.
Limited Knowledge	Severe	Moderately Likely	Limited knowledge on the culture and spiritual significance of the art created by the indigenous.	Heavily research the significance of art practices before referencing them or including them.
Implementation				
Taking Feedback	Moderate	Moderately Likely	The short timeline for art assets could prevent reiterating based off feedback	Complete atleast one of each asset type early on and get as much feedback as possible. Utilyze team for feedback and prioritize essential assets.
Unclear Pipeline	Low	Low Likelihood	Pipeline is not yet clearly defined. Unsure how to implement assets past adding to unity.	Define pipeline early on with programmer.
Design	**Severity**	**Likelihood**	**Description**	**Mitigation**
Creative Risks				
Limited Knowledge	Severe	Moderately Likely	The people on our team are currently not very knowledgeable about the native people of Hawai'i or their history. This could become a problem for our game later on.	We will make sure to do more than enough research to get our understanding of the topic to a point where we can accurately represent the people in a game space.

Preliminary Risk Assessment	Severity	Likelihood	Description	Mitigation
Clashing Ideas	Moderate	Moderately Likely	We have 4 designers, all with different ideas. These ideas may conflict with each other and cause some issues.	We will make sure to spend time talking through our ideas and will try to find compromises when conflicts do come up.
Culturally Respectful Ideas	Severe	Very Likely	As this is likely a foreign culture to us, we want to be coming up with ideas that respect the culture and aren't insensitive or disrespectful.	With enough research and contact with the proper sources this issue can be mitigated due to newfound knowledge about the culture and their traditions.
Implementation				
Finding Enough Work	Low	Moderately Likely	Because this is a game for kids, we have a limited amount of mechanics that we can put in the game. That also means there are limited things for the designers to code and create.	We will do a lot of brainstorming on how to best divide the work and how we can make our game more polished after our initial gameplay loop is coded.
Standardizing Pipelines	Moderate	Moderately Likely	Because we have so many designers, it will be important to have strong and thorough pipelines to avoid conflicts.	We will work together to build the pipelines early on in the project.
Programming	**Severity**	**Likelihood**	**Description**	**Mitigation**
Systems and Mechanics				
Drag and Drop	Low	Low Likelihood	Drag and drop functionality to move pieces of the regions around and snap to the specific proper regions which will then display pop ups with info	Make sure that any bugs with Unity Event Systems and layering setup up properly so that the drag and drop has no issues.
Click and Drag	Low	Low Likelihood	Drag your mouse from a start point and draw through obstacles towards an end point to learn about the region more in depth	Make sure collisions are setup properly with a bool system so nothing weird occurs.
Sounds Effect Feedback	Low	Moderately Likely	Feedback using audio cues, examples: Drag and Drop and Button SFX	Make sure the sound effects play properly, one at a time, and when called for.
Quiz Mode	Low	Low Likelihood	After Exploration Mode is unlocked you can test your knowledge on the information that you have already recieved (form TBD)	Make sure the information is correct and the form that it would be intuitive for 1st-3rd graders.
Region Information	Moderate	Moderately Likely	Region information regarding the region's culture among many other things are displayed in UI displays that can be looked at repeatedly after Exploration Mode and Quiz Mode has been unlocked	Make sure the information is correct using lots of research as make sure are culturally respectful.
Exploration Mode	Low	Low Likelihood	Once the whole island has been pieced together you can explore at your own will.	Set up system properly to give user free reign when island is completed.
UI Pop Ups & Transitions	Low	Moderately Likely	UI pop ups and transitions for when the drag and drops work in their proper ways.	Making sure that the UI and the transitions are consistently across all screens and display everything properly without any visual mess ups through the use of Unity Canvas changes, specifically making the Canvas "scale with screen size" with a native resolution of 16:9 or 1920x1080.

Key	Severity
Severe	A catastrophic show stopping failure
Moderate	Potentially damaging to either the team or the game.
low	May affect the quality of the game or effectiveness of the team.

Key	Likelihood
Very Likely	It is very likely that this issue will occur (75% +)
Moderately Likely	There is roughly an even chance of this situation occurring (75-25%)
Low Likelihood	There is a low likelihood of this occurring (-25%)