1. What topic will you teach, who is your target audience, and why are you passionate about this? (1 point)

Topic : Dance

Target Audience : Beginner Dancers, Returning Dancers, Dancers who do not have access to physical dance studios

I pursue dance as an avocation and have been passionate about it since 8 years. Dance is an escape for me. Whether I am happy, sad, angry, overwhelmed, stressed, exhausted or frustrated, I have always been able to dance through it. By doing what I do, if I can cultivate the passion for dance in even one person, I will consider it a meaningful achievement

1. What are the learning outcomes for this instruction? (*At the end of your lesson, what things should a person know how to do?*) (2 points) Hint: Don’t get overambitious – focus on 2-3 learning outcomes

* For beginners, I would like the dancers/students to understand beats, be able to recognize the tempo count the beats to a song.
* For intermediate dancers (who can pick and learn choreographies) : They should be able to retrospect and evaluate themselves and identify the gaps in their style/technique that needs to be bridged. (Metacognition/developing the potential to master). They should be able to make goal oriented progress.

1. How are you going to teach this topic? (*What technology platform are you going to use? Why have you chosen this platform? Why is this platform the best choice for this particular topic?)*Include some hand-drawn sketches of your ideas. How do you plan to prototype these ideas? (5 points)

* I am focussing on online dance learning platforms such as STEEZY, Tmily TV, CLI studios. After the initial research and with personal experience using these apps, STEEZY is the best dance app and I would be suggesting improvements on top of this app. Justification for why Steezy is the best app is given in the **appendix below.**
* I plan to prototype these ideas with Figma. I’ve included the rough design sketches and explanation of the features. Sketches included as a separate pdf file in the submission.

1. Talk to 3 people in your target demographic and tell them about your ideas. What do they think about your idea? What suggestions do they have for you to make a better product? Which of their suggestions will you consider (include the demographics of the people you talk to e.g., age, gender, why they are good user for your product etc). (5 points)

I talked to 3 people with various levels of exposure to dance.

* User 1 (Female, 25 years, beginner but interested to learn dance): She said that learning steps in relatively easy and is achievable but executing them with the correct rhythm and hitting the right beats is difficult. Further she mentioned that motivation is a major problem.
* User 2 (Female, 27 years, intermediate Dancer, has learnt multiple choreographies) : Difficult to pick up choreographies which have unfamiliar music genre. Tutorials which do not have a good break down of the steps are difficult to follow.
* User 3 (Male, 23, intermediate dancer): More focus on spatial awareness. Visual cues to identify left and right directions and profiling (45 deg to the audience, 70 deg to the audience).

**What will I work on ?**

I plan to implement **3 features.** I have chosen these features since the persist across the levels of expertise. Both beginners and intermediate dancers face the following problems.

1. Gamified Beat-Sense

Students have difficulty understanding the counts – full counts(1,2,3,4,5,6,7,8), half counts (1 and 2 and 3 and 4 and 5 and 6 and 7 and 8 and), quarter counts (1 e and a, 2 e and a, ….). After every chunk (16 – 32 counts) of choreography ask the students to plot on the interface which all beats we hit in the choreo. Doing this visual exercise will help students form mental models of the beat and corresponding step in a better way! A more ambitious extension – allow users to annotate different parts of the song (soundwave) to mark the steps/ important movements.

1. Concept Map based progress tracker

Tracking progress in dance becomes difficult when students are learning different forms, styles, techniques and it is not as helpful to just know the – no of classes taken, no of minutes invested in learning and other such metrics. A concept map which is like a directed acyclic graph (has linked prerequisites to learn the current course) will help students place themselves better in their journey to achieve their dance goals.

1. Spatial Awareness cues

Add labels in the video that indicate left and right (to avoid confusion between original and mirrored views). Textual pop-ups/ prompts to remind the profile if it’s slightly tilted from facing the audience (45 deg, 70 deg)

1. What are some existing technology products that will inspire your design choices and how? (*Include at least 4 products with screenshots of the ideas that inspire you; Review demo videos posted on slack’s #group-project-demo-videos) (4 points)*

**CLI Studios**

It has a good interface for dashboard.

A screenshot of a calendar

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**NoteTracks**

This is an app that lets the user take down notes /annotate with symbols or sketches on music waveforms. I would like to introduce a similar feature in the dance app where the students can annotate different sections of the song to remember the steps/counts.

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**Own Idea**

This is not an app but just a design idea. This is to quiz the students on the beat progression of the song to which they are learning the choreographies. For example, “Mark the full, half and quarter beats that you’re hitting in this 8 count sequence”.

A black background with white text and yellow and white letters

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**Spotify**

The way the lyrics are highlighted as the song progresses, I would like to use this design idea to highlight the full-count beats from the above number line as the song progresses to gamify the experience of learning the beats in the song and which beats we are hitting in this particular choreography.

A screenshot of a video chat

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**Statquest Concept Map**

Sometimes keeping track of the progress we have made in learning dance and whether we are on the right track to reach our goals is difficult. To ease the cognitive load, I would like to introduce the feature – concept map based progress tracker. Taking the design ideas from the apps shown below.

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1. What learning science and multimedia design principles (and why do they) support your instruction and design choices? (*Review class notes and group project journal) (3 points)*

* Scaffolding and Metacognition – with the help of concept-map based progress tracker, cognitive load of remembering the sequence of steps needed to reach the goal is taken off the user. Further, seeing a map of the journey rewards the user and reinforces motivation.
* Mental Models and Interactivity – It has been shown that dancers retain choreographies if they associate it with music be it vocals of beats. With gamified beat sense quiz will help students form stronger mental models.
* Passive Formative feedback – in the form of textual cues for spatial awareness that makes students correct themselves. The timing of the prompts is such that students have an opportunity to retrospect and correct themselves in the following seconds of the tutorial.

**Appendix**

**Why STEEZY? (Referring to one of my previous assignments in Ed Tech)**

Steezy offers a studio-on-the-move. It is an async dance platform for all levels of dancers but it is not just a dump of tutorial videos. It caters to each individual’s learning objectives (personalized learning) – do they want to learn a routine? Do they want to learn a dance form from the foundations? Do they have prior experience in dance and want to improve a certain skill set? We can adjust the pace of the video, change the view of the camera (back, front, side) and view ourselves through web cam beside the dancers for reference. I feel it is a perfect showring-doing example of Instruction based learning. Not only does it prioritize the individual’s desires (which drives motivation as in the case with Charlie for swimming) but also it builds the foundations by showing examples of basic moves and how they differ from other dance forms. [Please find the screenshots in the end of the document for reference]. It ensured engagement by designing features such as dance challenges among the community of dancers and steezy-party-sessions where multiple people can learn the choreography together remotely. There is scope for improvement in some aspects of Education Technology scope - evaluation, design/redesign. There is not active/passive feedback and all the evaluation is self regulated. If it is “feasible” to integrate activity recognition to analyse the posture of the student dancer and compare it with a range of ground truth postures to assess the progress. The students can also be given a dashboard about their activity, a accuracy chart based on the score from posture detection and other learning analytics to create an adaptive learning environment. The fact that it gives a platform for the professional dancers to reach out and help people become more competent adds beauty to the business model. They saw the symptom of siloed workshops based on the region the choreographer is from and the limited reach they had, they analysed the problem of a missing dancer-friendly digital platform and catered to the need by designing, developing and deploying a dance-studio-on-the-move.

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