Lesson 8.3 - Building a Plan ## Learning Objectives Students will be able to... * Identify the main components of a functional project specification and explain the purpose of each section * Develop a project idea into a full, detailed specification ## Materials/Preparation ## Pacing Guide | Duration | Description | | --------- | ---------- | | 5 minutes | Do Now | | 10 minutes | Review feature lists and flow chart | | 20 minutes | Spec writing | | 15 minutes | Building implementation plan| | 5 minutes | Debrief and wrap-up| ## Instructor's Notes ### 1. Do Now * Project the Do Now on the board, circulate around the class to check that students are working and understand the instructions. ### 2. Review feature lists and flow chart * If time allows, ask one or two students to share their feature list and/or flow chart and discuss with the class. * Ensure that students have an understanding of the proper level of detail at this point. #### Spec writing * Using the details from their pitch, their feature lists, their flow charts, and the feedback they've received, students should fill out the rest of the [Final Project Plan Organizer]. ##### Vital * At this stage students be as detailed and thorough as they can. * Any missing information will complicate the process later when they realize what was left out. * Encourage students to take their time and make sure they hit everything. * While this process is happening, instructors should circulate through the class and check-in with student. * Verify that they have a complete, well-thought out idea that is feasible to complete in the available time. * If you have concerns about a student's ability to complete the proposed project, help them scope down by removing or simplifying features. ### 3. Implementation plan * Students should use the details built in their plan organizer to list the tasks necessary on their [Final Project Development Plan]. * Emphasize to students that tasks should be at a very low level of granularity (hence the time requirement being specified in minutes). * If a single task has a time estimate of more than a few hours, the student should try to break the task into smaller pieces. * Ensure that students do not skip "trivial" or "simple" tasks (such as building a script they have written before) or non-coding tasks (such as developing graphics) in their plan. ### 4. Debrief * As class ends, remind students that their spec and implementation plan will be their guides throughout the process. * They should update them each day and keep them with them at all times. * Ideally, anytime there is a question about the requirements or scope of the project, the spec should have the answer. * If not, it's a new idea and the spec needs to be updated accordingly. ## Accommodation/Differentiation [Final Project Plan Organizer]:https://teals-introcs.gitbooks.io/2nd-semester-introduction-to-computer-science-pri/content/units/8_unit/final_project_plan_organizer.docx [Final Project Development Plan]:https://teals-introcs.gitbooks.io/2nd-semester-introduction-to-computer-science-pri/content/units/8_unit/final_project_development_plan.docx ## Forum discussion [Lesson 8.3 - Building a Plan (TEALS Discourse Account Required)](https://forums.tealsk12.org/c/2nd-semester-unit-8-final-project/lesson-8-03-building-a-plan)