Time Pies
Use Case Diagram

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History Revision:

Revision Date	Person Responsible	Version Number	Modification
9/11/14	Patricia Kelly Co Kenneth Otsuka Mary Jane Rubio	1.0	Initial Document.

System Name: Time Pies – A Mobile Time Management Application

Description: The application is a time management tool to help users (i.e. students) with their daily activities by providing a visual aid to keep track of their time and boost productivity. It is a to-do list for the day presented in the form of a pie chart. Each task added to the list will be a slice of the pie. These slices can be arranged by dragging and be resized by moving their partitions. The duration for the entire list will be set by the user and based on the ratio of each slice to the whole pie, the application will compute what fraction of the inputted time is allotted to each task. Once set to start, the pie will act as a timer that alarms whenever a slice runs out of time and asks whether the task is finished or not. If yes, it will show the next task, otherwise it will give the option to adjust the remainder of the pie.

Use-Case Diagram:
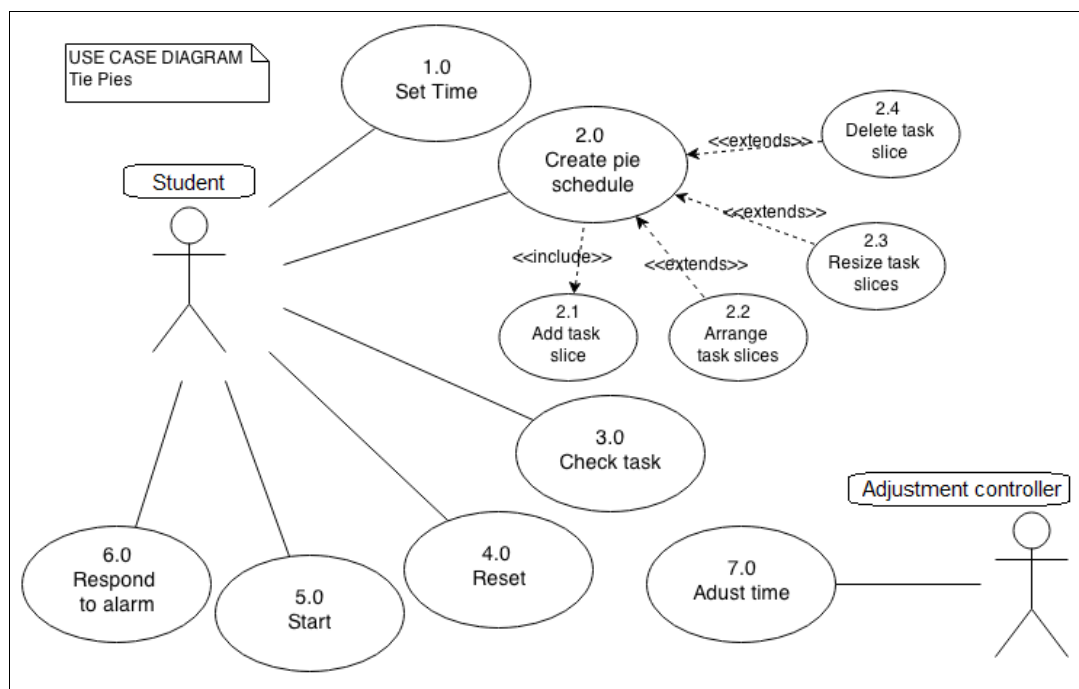
List of Actors:

Actors	Description
Students	Students that need help in time management. Those with the habit of making a to-do list for the day and try to complete them successfully. They can use Time Pie to create a visually appealing schedule that will help keep track of their time and tasks.
Adjustment controller	Adjusts the time for the remaining tasks when the student uses auto-adjust. It will recalculate the duration for each task by distributing the remaining time accordingly. This will not change the appearance of the pie schedule.

List of Use-cases:

Use-Case	Description
Use-Case 1.0 Set Time	The time frame of the pie is set by the user. The input can be either the duration or the start and end times expected to accomplish all the tasks in the schedule. Once the user has started the timer of the pie, the application will run during the given time.
Use-Case 2.0 Create Pie Schedule	This is the main operation of the application. The pie schedule is manually created by the user by adding, arranging, allotting time, and deleting. It cannot be edited once the user has started the timer.
Use-Case 2.1 Add Task/Slice	A task is added by inputting its name and choosing a color. It is added to the pie schedule as a slice with the chosen color. The user can add up to 18 tasks only.
Use-Case 2.2 Arrange Task/Slice	The tasks can be easily rearranged. The slices are moved by dragging them clockwise or counterclockwise along the pie. This can be done anytime when creating the pie schedule.
Use-Case 2.3 Resize Slices	Only after all the tasks have been added can the user change their sizes. Once resizing has occurred, adding a task will be impossible. Slices are resized by dragging their partitions. The size of a slice is used to compute for its corresponding task's allotted time. The ratio of a task's duration to the time frame of the whole pie is equal to the ratio of the slice's area to the pie's.
Use-Case 2.4 Delete Task/Slice	Tasks can be deleted one at a time. Since there is no edit task function, the alternative is to delete and add. This can be done anytime when creating the pie schedule.
Use-Case 3.0 Reset	This deletes all the tasks resulting to an empty circle. It is useful when the user wants to add tasks after resizing. This can be done anytime
Use-Case 4.0 Start	This starts the timer of the pie. Also, the user picks from which task to start. Once the start button is pressed, the schedule cannot be modified.

Use-Case	Description
Use-Case 5.0 Respond to Alarm	The application will alarm once for a few seconds whenever a task runs out of time. At the same time, it will ask the user if the task is finished or not. If yes, the next task will be shown and the timer will resume. Otherwise, the user will have the option to auto-adjust.
Use-Case 6.0 Check Task	The user can view the detail of a slice by clicking it. This will show the task and its remaining allotted time. This can be done anytime.
Use-Case 7.0 Adjust Time	This function occurs when the time allotted for a task runs out. When the task ends and the user still wants to continue doing the task, the remaining time allotted for the rest is adjusted to accommodate the added time to the task. Otherwise, this function does not apply.