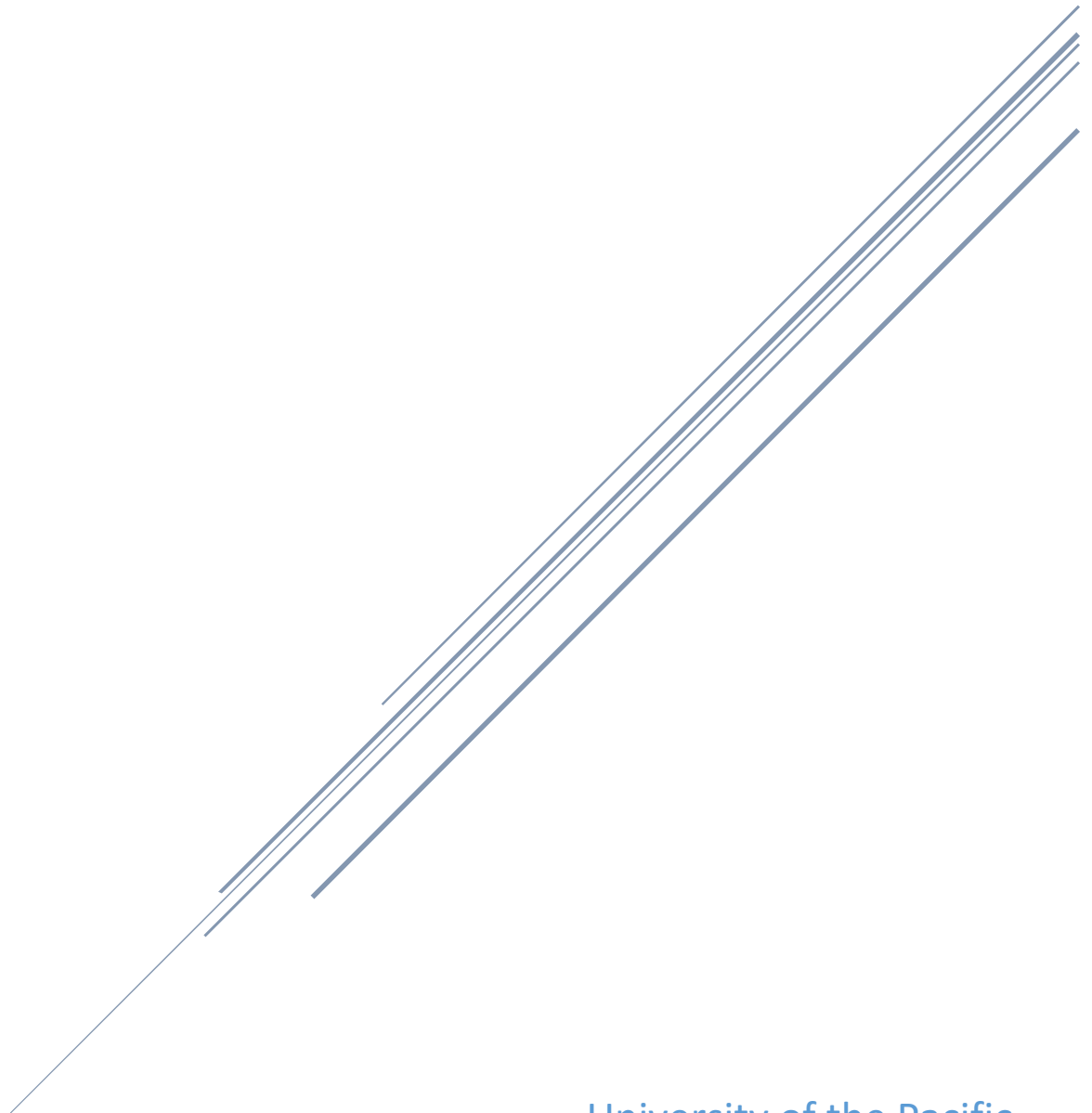


# TIMESPRITE

## Senior Project Proposal



University of the Pacific  
COMP 188, Senior Project, 2015 Fall ---Yunpeng Zhang

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## 2 TEAM PROFILE

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Yunpeng Zhang (Leader, Designer, presentation, documentation, programming, and other)

I have good development experience because my good programming skills. For designing, I took COMP 135, which is Human – Computer Interaction class, so I can design a friendly and easy-use program.

For the coding and programming, I'm learning Swift code for iPhone App on Udacity online course. This project is a good chance to inspect what I learned.

### 3 PROJECT DESCRIPTION

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TimeSprite is an iPhone and iPad App for time manager. The basic function of this app is automatically help users manager their time. So this app will have following functions, including but not limited:

1. Assign tasks
2. Look up tasks
3. Manage time
4. Change system schedule
5. Create event in system schedule
6. Task Alert

TimeSprite is a utility App, its user will be every person who want to have an efficiency calendar to manager their time, and find best way to finish their tasks.

At first, user will be asked to set basic information, such as busy time, relax time, unavailable time, etc,

Then, users assign tasks should have following properties:

1. Task name
2. Start date
3. End data
4. Estimate time (Hours)
5. Priority (High, Medium, Low)
6. Details
7. Can be divided(True or False)
8. Time for each parts( If this task can be divided, automatically calculate by app)

TimeSprite will pull calendar data from user's device, and following task propriety to fill up free time day by day. Moreover, App pull calendar data from device, and mark busy time, relax time and unavailable time between "start date" to "end date" of task. Then check "can be divided" propriety is true or false. If it is true, app will create calendar events to fill up free time. If it is false, App will find a free time which is enough to put this task.

For example, the user assign two task named "Homework 1" and "Shopping". There is some proprieties for those two tasks:

Task	Homework 1	Shopping
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Task name	Homework 1	Shopping
Start date	08/10/2015 0:00	08/10/2015 0:00
End date	12/10/2015 23:59	12/10/2015 23:59
Estimate Time (hours)	5	2
Priority	High	Low
Details	COMP 177 Homework 1	Buy some food
Can be divided	True	False
Time for each parts( hours)	1	2

And user set busy time on weekday is from 8:00 a.m. to 5:00 p.m. Relax time is from 6:00 p.m. to 8:00 p.m. and unavailable time is from 10:00 p.m. to next day 8:00 a.m. On weekend, user does not have busy time, relax time is 2:00 p.m. to 5:00 p.m. and have an event from 5:30 p.m. to 8:00 p.m. Unavailable time is 11:00 p.m. to next day 10:00 a.m. Here is the calendar view:

	Sunday	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday
0:00	U	U	U	U	U	U	U
1:00	U	U	U	U	U	U	U
2:00	U	U	U	U	U	U	U
3:00	U	U	U	U	U	U	U
4:00	U	U	U	U	U	U	U
5:00	U	U	U	U	U	U	U
6:00	U	U	U	U	U	U	U
7:00	U	U	U	U	U	U	U
8:00	U	B	B	B	B	B	U
9:00	U	B	B	B	B	B	U
10:00		B	B	B	B	B	
11:00		B	B	B	B	B	
12:00		B	B	B	B	B	
13:00		B	B	B	B	B	
14:00	R	B	B	B	B	B	R
15:00	R	B	B	B	B	B	R

16:00	R	B	B	B	B	B	R
17:00	R	B	B	B	B	B	R
18:00	E	R	R	R	R	R	E
19:00	E	R	R	R	R	R	E
20:00	E	R	R	R	R	R	E
21:00							
22:00		U	U	U	U	U	
23:00	U	U	U	U	U	U	U

Following the settings and task propriety, TimeSprite will divided task “Homework 1” into 5 part, and fill them to every evening from 8 p.m. to 9:00 p.m. from 08/10/2015 to 12/10/15. Because task “Shopping” cannot be divided, the App will put this task on Sunday morning, 11/10/2015, from 10:00 to 12:00. So after TimeSprite successfully save task and generate new schedule, users calendar should look like the following:

	Sunday	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday
0:00	U	U	U	U	U	U	U
1:00	U	U	U	U	U	U	U
2:00	U	U	U	U	U	U	U
3:00	U	U	U	U	U	U	U
4:00	U	U	U	U	U	U	U
5:00	U	U	U	U	U	U	U
6:00	U	U	U	U	U	U	U
7:00	U	U	U	U	U	U	U
8:00	U	B	B	B	B	B	U
9:00	U	B	B	B	B	B	U
10:00	Shopping	B	B	B	B	B	
11:00	Shopping	B	B	B	B	B	
12:00		B	B	B	B	B	
13:00		B	B	B	B	B	

14:00	R	B	B	B	B	B	R
15:00	R	B	B	B	B	B	R
16:00	R	B	B	B	B	B	R
17:00	R	B	B	B	B	B	R
18:00	E	R	R	R	R	R	E
19:00	E	R	R	R	R	R	E
20:00	E	R	R	R	R	R	E
21:00	HW1	HW1			HW1	HW1	HW1
22:00		U	U	U	U	U	
23:00	U	U	U	U	U	U	U

In addition, if users' schedule is full or conflict, TimeSprite will ask user if they want to reduce their relax time, and consider the priority property of task to make sure high propriety task will be finished first than others.

## 4 DEVELOPMENT CONCERNS

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I will use Xcode as programming IDE on MacBook Air. And use Microsoft Visual Studio Online to manager this project, it include agile process, task assign, calendar and Git version control.

The biggest challenge is the Microsoft Visual Studio Online is not good support Xcode, so I create an empty Visual Studio project use Visual Studio 2015, and clone project repository by using Xcode. Thus, Xcode can use version control to manage programming code.

Then there is a challenge I can predict is TimeSprite need good algorithm to create and assign each tasks. I will handle this problem before coding.