Team 27 : Travelpad
Product Specification

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1. Product BackLog

- **User function**: Users are able to log-in, log-out and register.
  - Log-in / out: only certificated users can update the itineraries they have access control
  - Register: new user can sign in to access our web service
- **Itinerary management**: Users are able to manage the itineraries.
  - List itineraries: list all current and past itineraries.
  - Add Itinerary: add a new Itinerary
  - Modify Itinerary: Modify the setting of a given Itinerary.
- **What's hot:** List the "hottest" itineraries in the system.
  - UI side: Sort "hottest" by two criteria: one is by the number of reviews, and one is by the rating score.
  - Database side: Store feedbacks of itineraries containing the information of rating.
- **Plan Schedule**: Multiple users are able to work on a travel schedule together by specifying which activities are done at which time, at which restaurants will they eat, at which hotels will they sleep etc.
  - Add event: User can create an event by clicking 'add event'. There are four types of event for users to choose from. After finish editing the new event, user can either add the event into their schedule or propose the idea for other participants to vote.
  - Edit event
  - Map display: Map will display the itineray of specific day and list all the spots you're going to visit and the basic route.
  - Schedule display: Display the schedule by day or by week.
- **Todo List** : To track tasks need to be done for current editing itenary, e.g. buying airline tickets, making hotels reservation.
  - Todo List View : show all todo items including task, owner and status.
  - When adding an event, a todo item can be added as regarding to the event.
  - A todo item can also be added manually in the Todo List view.

- ○ All participants can assign himself/herself to an unassigned todo item.
- ○ Only the owner of a todo item can change the status of it (i.e. unassigned, on progress, done).
- **Vote**: Users are able to "agree" or "disagree" on a proposed event that are currently inside schedule or in the planning area. So the opinion of majority members can be reflected in the actual itinerary.
  - ○ List current voting items: a user can view all voting items he or she is involved
  - ○ Vote: a user can decide he or she agree or disagree the proposal (voting item)
  - ○ Result Evaluation: After collecting partial votes, our system would decide if the proposal is passed or not by checking if over half participants had agreed or disagreed already.
- **Planning Helper**: The system creates recommended route based on the the group's current schedule. It also allows user to customize the route and visualize it on the map.
  - ○ Route optimization: Give you the best route for the day.
- **Spot Feedback**: Storing the rating and feedback of a sopt so that the system can suggest users which spot is recommended.
- **Cost**: Users can estimate the cost they would spend before the trip. Users may also record the checks they would like to split during the travel.
  - ○ Cost generation: generate "default" votes according to the input in events
  - ○ Add cost: manually add a cost item. It's possible to specify which participants are involved into theis cost item so only these people are count in splitting.
  - ○ Split: Split the cost to everone knows how much he/she is expected to pay for the trip.
- **Chat room**: Allow users to discuss concurrently on the chat room.
  - ○ Display post: display current discussion.
  - ○ Make post: post new message or reply.
  - ○ Display comments and add a comment on a post.
- **Export**: In the end of editing, users can export the whole itinerary as a single file to print out for carrying during their travel.
  - ○ The itenary can be export as PDF file containing detail information of the itenary.
- **Photo Album and Share Feedback**: Users can publish and share their itinerary to get others' feedback, and give their own experiences to others' itinerary as feedback. They can also upload photos.
  - ○ Generate feedback page: user can post feedback for each events he / she participated and for the whole journey.
  - ○ Make feedback: feedback involves the a rating and text message.
  - ○ Upload photo: user can also upload photos.
  - ○ See all feedback: user can see other particiants' feedback after he / she has completed the feedback.

2. First Spring BackLog

Prototype of Plan Schedule and Todo List.

3. Data Models

Database name: travelpad

Name of the table	User			
Description	Users' profile			
Attribute	**Description**		**Type**	**Examples of values**
Id	Id of a user		Integer	Between 1 and 999999999
Username	Name of a user		String	John
Email	Email of the user		String	eppinger@cmu.edu
Photo	User's photo		File	image/jpg
Password				
Itineraries	[ManyToMany] iterineraries involved by the user			
Primary Key	id, username			
Foreign Keys				

Name of the table	Itenerary		
Description	Users' itineraries		
Attribute	**Description**	**Type**	**Examples of values**
Id	Id of an itinerary	Integer	Between 1 and 999999999
Created_by	Created by a user (username)	String	John
Title	Title of the itinerary	String	Fun Paris
Description	A simple description for this itinerary	String	
Location	city code?	String	
Start_date	the date when set off (no detail time)	Date	Apr 1, 2015
End_date	the date of returning	Date	Apr 4, 2015
Participants	Participants who have access control of this itinerary [ManyToMany] mapping to user		
photo	Thumbnail of this itinerary (shown in main page)	File	image/jpg
timestamp		Date	
Primary Key	id		
Foreign Keys			

Name of the table	Event		
Description	Events in an itinerary		
Attribute	Description	Type	Examples of values
Id	Id of an event	Integer	Between 1 and 999999999
Created_by	Created by a user (username)	String	John
Type	Restaurant/ hotel/ attraction/ transportation	String	
Title		String	
Note		String	
Start_date		Date	
Start_time		Time	
End_date		Date	
End_time		Time	
place_id	ID of Google Place API		
place_name			
place_latitude			
place_longitude			
Route	Response of Google Direction API	JSON	
source	event.id		
destination	event.id		
proposed		boolean	

timestamp	
Primary Key	id
Foreign Keys	Itinerary.id, source, destination
SQL Code	

Name of the table	Todo		
Description	todo list		
Attribute	**Description**	**Type**	**Examples of values**
Id	Id of a todo list	Integer	Between 1 and 999999999
Created_by	Created by a user (username)	String	John
Task		String	
Status		String	
Related_event	event.id	String	
Related_itenerary	itenerary.id		
Owner		Username	
Note		String	

Timestamp			
Primary Key	id		
Foreign Keys	event.id		

Name of the table	Cost		
Description	Cost		
Attribute	**Description**	**Type**	**Examples of values**
Id	Id of a cost	Integer	Between 1 and 999999999
Created_by	Created by a user (username)	String	John
prepaid_user	(User) ManytoMany key	String	
participant	(User) ManytoMany key	String	
Related_event	event.id	String	
Related_itenerary	itenerary.id		
Owner	user.username	Username	
Note		String	
Amount		Integer	
Timestamp			
Primary Key	id		

Foreign Keys	event.id

Name of the table	Vote			
Description	Vote			
Attribute	**Description**	**Type**	**Examples of values**	
Id	Id of a vote	Integer	Between 1 and 999999999	
Created_by	Created by a user (username)	String	John	
Related_event	event.id	String		
voted_user	(User) ManytoMany key	String		
agreed_user	(User) ManytoMany key	String		
Primary Key	id			
Foreign Keys	event.id			

Name of the table	Message		
Description	Messages in Chat room		
Attribute	**Description**	**Type**	**Examples of values**

Id	Id of a message	Integer	Between 1 and 999999999
Created_by	Created by a user (username)	String	John
text	content	String	hi
Timestamp			
Foreign Keys			
SQL Code			

Name of the table	Reply		
Description	Replies of Messages in Chat room		
Attribute	**Description**	**Type**	**Examples of values**
Id	Id of a reply	Integer	Between 1 and 999999999
Related_message	Message.id		
Created_by	Created by a user (username)	String	John
Text	content	String	hi
Timestamp			
Primary Key	id		

Foreign Keys	Message.id

Name of the table	Feedback_place			
Description	Feedback of a place			
Attribute	**Description**	**Type**	**Examples of values**	
Id	Id of a feedback	Integer	Between 1 and 999999999	
Created_by	Feedback by a user (username)	String	John	
Place_id	place.id (note: transportation has no place.id)		NULL 1-9999999	
Comment		String		
Rating	1-5	Integer		
Timestamp				
Primary Key	id			
Foreign Keys	event.id			

Name of the table	Feedback_itinerary
Description	Feedback of a itinerary

Attribute	Description	Type	Examples of values
Id	Id of a feedback	Integer	Between 1 and 999999999
Created_by	Feedback by a user (username)	String	John
Initerary_id	Initerary.id		NULL 1-9999999
Comment		String	
Rating	1-5	Integer	
Timestamp			
Primary Key	id		
Foreign Keys	event.id		

Name of the table	Photos		
Description	Uploaded by users		
Attribute	**Description**	**Type**	**Examples of values**
Id	Id of a photo	Integer	Between 1 and 999999999
Created_by	uploaded by a user (username)	String	John
Related_event	event.id		

Comment	tag who is in the picture	String	NULL 1
Timestamp			
Primary Key	id		
Foreign Keys	event.id		

4. UI Mockups

4.1 Login

Register

Username
Password
Login   forget pw

4.2 Register

Login

Username
Password
Confirmed Password
Email
capcha
Register
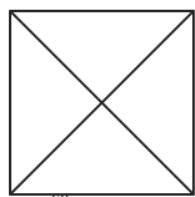
4.3 Itenary Collecitons

Being Planned
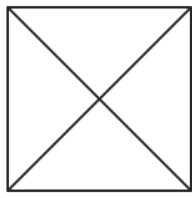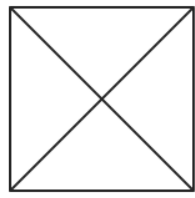
title
Location
with Someone, Somebody, ...
Period: Apr 1, 2015 - Apr 3, 2015

Enjoying the Trip

Wonderful Memory

Paris
by User_X, User_Y, ...

★ ★ ★

Kaohsiung

★ ★ ★ ★ ★
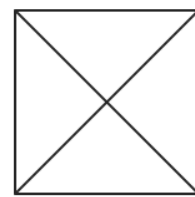
My Favorite

Location
with Someone, Somebody, ...

4.4 Hot Itenary

🔍 Search

Location
with Someone, Somebody, ...
Period: Apr 1, 2015 - Apr 3, 2015

Paris
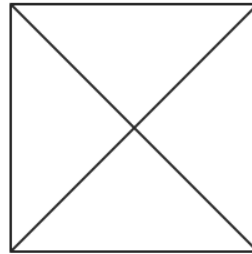by User_X, User_Y, ...
★ ★ ★

Location
with Someone, Somebody, ...

Location
with Someone, Somebody, ...

Location
with Someone, Somebody, ...
Period: Apr 1, 2015 - Apr 3, 2015

Paris
by User_X, User_Y, ...
★ ★ ★

Location
with Someone, Somebody, ...

Location
with Someone, Somebody, ...

Location
with Someone, Somebody, ...
Period: Apr 1, 2015 - Apr 3, 2015

Paris
by User_X, User_Y, ...
★ ★ ★

Location
with Someone, Somebody, ...

Location
with Someone, Somebody, ...

4.5 User Profile

Itinerary Collection   Hot

Nickname

Email

Old Password

New Password

Confirmed New Password

(Select Portrait) Filename

☑ Enable Email notification when my messages are commented

☑ Enable Email notification when messages I commented are commented

(Update)

4.6 TODO List

Task	Event	Status	Owned by	Note
Make reservation at Lulu restaurant		pending ⬍	Not assigned (Take this)	
Make reservation at X hotel		on progress ⬍	👤 Darren	
Buy bus tickets		Done ⬍	👤 Kenny	

➕

4.7 Cost

Total Cost: 357.95

3/10:   157.31   ⬇

Flight Ticket : 99.99   👤 👤 👤 👤
Dinner: 20.00   👤 👤
Motel: 30.00   👤 👤 👤 👤

➕

3/11:   69.83   ⬇

3/12:   130.81   ⬇

Cost Name
Some Text

Cost
☐ Need Split
Some Value

Participant
☐ Everyone
👤 👤 👤 👤

payer

(Confirm) (Cancel)

4.8 Chatroom

What do you want to say?

I'm Darren

Darren   2015/3/10

Cool!

Kenny   2015/3/10

Post Reply

4.9 Photo Album Share

/ Your feedback \/ Everyone says \/ Trip Reports \

Feedback of the trip

3/10

Flight: Pittsburgh International Airport
★★★☆☆

We almost missed the flight! So easy to get lost here.

Need to arrive the airport early next time...

Sight: Carnegie Mellon University
★★★☆☆

OMG! This university is so small!

I told you it's not a good idea to eat lunch here...

Overall Rating
★★★☆☆

Perfect trip! I love you guys.

I hope we can come back next time!

4.10 Add Event - Hotel

☒ | Attractions | Hotel | Transportation | Restaurant |

Name

| Input your name |

Date
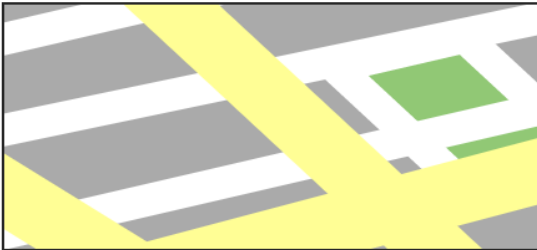
| from 📅 | | to 📅 |

Hotel Name

| 🔍 Search | Need help?

Estimate Cost | Insert estimate cost |

Todo List | Add a todo |

One
Two
Three

Notes | Insert your notes |

(Add) (Propose)

Find hotels in: | 🔍 Search | | Country ⬍ |

- Hilton
- DoubleTree
- /
- /

4.11 Add Event - Transportation
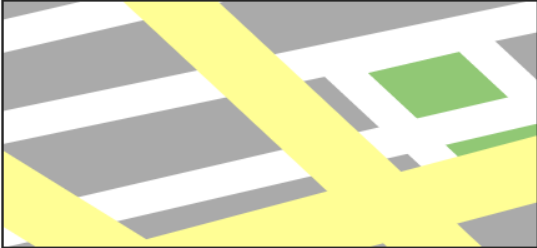
☒

| Attractions | Hotel | Transportation | Restaurant |

Name

Input your name

Date

Date

Date

Date

From

Place

To

Place

Transportation Type

Bus, walk, etc..

Estimate Route and time

Estimate Cost   Insert estimate cost

Todo List   Add a todo

One
Two
Three

Notes   Insert your notes

Add   Propose

4.12 Add Event - Restaurant

☒ / Attractions \/ Hotel \/ Transportation \/ Restaurant \

Name

| Input your name |
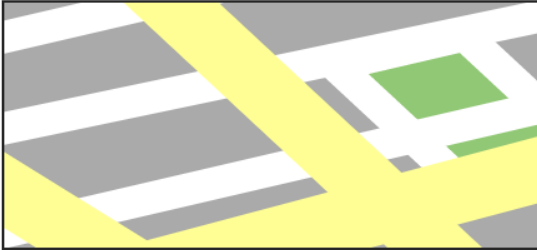
Date & Time

| from | 🖩 | | to | 🖩 |

Restaurant Name

(🔍 Search)

Need help?

Estimate Cost | Insert estimate cost |

Todo List | Add a todo |

One
Two
Three

Notes | Insert your notes |

(**Add**)   (**Propose**)

Find restaurants in(🔍 Search) | Country ⬍ |

- Everyday noodle
- five guys
- /
- /

4.13 Add Event - Attraction

☒ | Attractions | Hotel | Transportation | Restaurant |
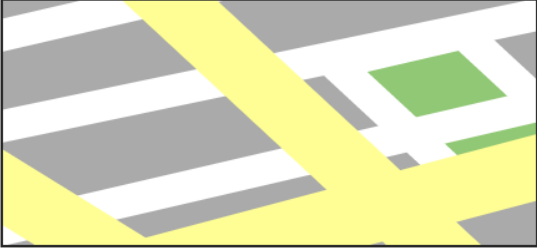
Name

Input your name

Date/Time

| from | 🔢 | | to | 🔢 |

Location

🔍 Search

Estimate Cost — Insert estimate cost

Todo List — Add a todo

One
Two
Three

Notes — Insert your notes

Add   Propose

➕

4.14 Calendar-Map

| | | Day | Week |

	Mon 3/9	Tue 3/10	Wed 3/11	Thu 3/12	Fri 3/13	Sat 3/14	Sun 3/15
10 am		10-11 am Empire State Building					
11 am		Car					
12 am		Gramercy Tavern					
1 pm		Bus					
2 pm		Hotel					
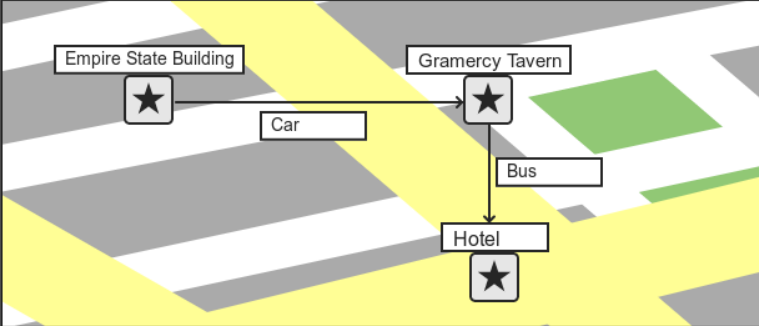
(Add Event)

March 2015 ‹ ›

TODO List

4.15 Add Itenary

☒

Title		description
Location		

from 🗓   to 🗓

(Select Images)   Filename

4.16 Export

Download PDF

Print Itinerary