



HOTEL DATE ENTRY

DESIGN & USABILITY

REPORT

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Travel UCD

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2 About the author

This report has been written and researched by **Alex Bainbridge**. He is a senior consultant at Travel UCD and specialises in travel website user-interface design issues.

Alex produced his first website in 1994. He has since worked in a variety of software design, development, commercial and project management roles, lately in the travel industry.

Before forming Travel UCD he was the head of web design and development at Andbook Online (online hotel distribution). He has extensive experience in the independent, adventure, and cultural tour-operator sector, and was managing director of a UK-based tour operator.

Alex holds a BSc (Honours) in Applied Computing and is a member of the Usability Professionals Association.

3 Executive summary

Overview

This report reviews the designs used today for entering dates into hotel booking websites.

It proposes a tested, easy-to-use, date-entry layout style and format that can be implemented on any hotel booking website.

This report also suggests 25 date-entry design guidelines.

Target audience

This report is aimed at:

- Web designers of hotel booking websites
- Web design directors
- Anyone with an interest in making hotel booking websites easier to use

Report scope

This report focuses on date entry for end-consumer hotel-booking functionality – either for business travel or leisure breaks.

For travel agent systems, where users may be predominantly using keyboards (rather than mice), other date-entry methods may be more powerful or efficient.

Information sources

This report is based on the analysis of the following:

- A **functionality evaluation** of 109 hotel websites (19 travel agencies, 68 hotel booking agencies, 22 hotel chains)
- A **usability test** with eight users (participants) conducted on four websites (see Appendix)
- Existing **web design guidelines**

The following website definitions are used throughout this report:

Travel Agency: A website that offers more products than just hotel booking functionality (e.g. car hire, flights) – for example Travelocity.com, Expedia.co.uk, Orbitz.com.

Hotel Booking Agency: A website that takes hotel bookings / reservations as its primary business – for example Hotels.com, Placestostay.com, Lodging.com

Hotel chain: A website specifically for a hotel chain – for example Hilton.com, Marriott.com

3.1 Scenarios to support

There are three main ways that users consider dates for hotel reservations:

- Known start date and end date (e.g. September 15th to 18th)
- Known start date and number of nights (e.g. September 15th for 3 nights inclusive)
- Known day of the week (e.g. next Friday for 1 night)

This report will demonstrate how different date-entry functionality supports these three scenarios.

3.2 Standard date-layout styles

There are three main date-entry styles currently in use:

- Check IN / Check OUT
- Check IN & Number of nights
- Check IN / Check OUT / Number of nights (combined)

The following table shows examples of these styles:

TABLE 1: Date layout styles

Date layout style	Examples
Check IN / Check OUT	<div style="text-align: center;"> <p>Check-in date: (DD/MM/YY) Check-out date: (DD/MM/YY)</p>  <p>(Expedia.co.uk)</p> </div>
Check IN / Number of nights	<div style="text-align: center;">  <p>(Trivago.com)</p> </div>
Combined	<div style="text-align: center;">  <p>(Opodo.co.uk)</p> </div>

Source: Travel UCD Research, June 2002

TABLE 2: Date layout styles, all sites

Date layout style	Total
Check IN / Check OUT	53 (49%)
Check IN / Number of nights	42 (39%)
Combined	10 (9%)

Source: Travel UCD Research, June 2002

Surprisingly, although there is a major split between the percentage of sites using *Check IN / Check OUT* (49%) and those using *Check IN / Number of nights* (39%), there doesn't seem to be much support for the *Combined* style (9%), although the combined style has the advantages of both.

TABLE 3: Date layout styles

Date layout style	Travel agency	Hotel only	Hotel chain
Check IN / Check OUT	11 (58%)	27 (40%)	15 (68%)
Check IN / Number of nights	4 (21%)	33 (49%)	5 (23%)
Combined	2 (11%)	6 (9%)	2 (9%)

Source: Travel UCD Research, June 2002

Table 3 demonstrates that the split between the two distinct date layout styles is repeated across the three hotel website types.

Notes from the usability test

- On ten occasions (out of 32 completed date-entry tasks) the users entered an incorrect date (further details in the Appendix)
- The majority of users entered the Check-IN date first, then the Check-OUT date.
- Some users entered the Check-IN day, Check-OUT day, Check-IN month/year, Check-OUT month/year.

Guidelines

1. The combined style should be used.
2. The number of nights should automatically be calculated from the Check-IN and Check-OUT dates.
 - a. If the user changes the Check-IN date, the Check-OUT date changes
 - b. If the user changes the Number of nights, the Check-OUT date changes
 - c. If the user changes the Check-OUT date, the Number of nights changes

Implementation note: The design for date entry is *booking-engine independent* – i.e. even if your booking engine requires Check-IN date and Number of nights – you are still able to implement the combined style.

4 Date entry forms

4.1 Date format style

There are three primary means to display and enter the date itself into a website:

- Separate entry of day, month and year
- Separate entry of day – combined month and year
- Straight date entry – for example DD/MM/YYYY

TABLE 4: Date format styles

Date format style	Examples
Day, Month, Year	<input type="text" value="24"/> <input type="text" value="June"/> <input type="text" value="2002"/>
Day, Month/Year	<input type="text" value="30"/> <input type="text" value="Sep 2002"/>
DD/MM/YYYY	<input type="text" value="30/6/2002"/>

Source: Travel UCD Research, June 2002

TABLE 5: Use of date format styles

Style	Travel agency	Hotel only	Hotel chain	Total
Day, Month, Year	4	47	6	57
Day, Month/Year	10	15	15	40
DD/MM/YYYY	5	2	1	8
Other	-	4	-	4

Source: Travel UCD Research, June 2002

Table 5 demonstrates that the dominant design for travel agency and hotel chain websites is to have a day and combined month/year system.

Notes from the usability test

- On the website that required DD/MM/YYYY, one user entered '30thoct' and '2nov' – this is because the required format was not clear to the user.



FIGURE 1: Expedia.co.uk – example of no date-format displayed (daily deals)

Guidelines

3. The Day, Month/Year approach should be used. This reduces the number of items the user has to change when entering a date.
4. Months, where shown in dropdowns, should always be full length rather than abbreviated – i.e. 'August' rather than 'Aug'.

4.2 Combining the month with the year – further analysis

TABLE 6: Year visibility

Year visibility	Examples
Year shown clearly	<input type="text" value="30"/> <input type="text" value="Sep 2002"/>
Year not shown	<input type="text" value="June"/> <input type="text" value="25"/>

Source: Travel UCD Research, June 2002

TABLE 7: Prevalence of year visibility

Year visibility	Travel agency	Hotel only	Hotel chain	Total
Year shown clearly	4	9	4	17
Year not shown	6	6	11	23

Source: Travel UCD Research, June 2002

Table 7 demonstrates that, of the 40 websites using the combined month/year approach, only 17 (43%) show the year.

Notes from the usability test

One user, when calculating the date for ‘2 weekends time – Friday & Saturday night’ mis-entered the month. Rather than entering July 5-7th (which should have been entered) – he entered June 5-7th. This was a simple error – but because the year was not shown clearly – the user was actually entering in June 5-7th 2003.



FIGURE 2: Travel Select – error message

An error message (shown at Figure 2) was displayed to the user. He could not understand the message because, to him, the date was only 2 weeks ahead – rather than 12 months ahead. There would have been much less chance of this error occurring had the year been displayed with the month.

Guideline

5. The year should be displayed in the dropdown whenever you combine the year entry with the month.

4.3 'Rolling' dropdowns

A 'static' month dropdown always lists the months sequentially from January to December.

A 'rolling' month dropdown lists the twelve months in chronological order starting from the current month.

TABLE 8: Dropdown styles

Static dropdown	Rolling dropdown (June 2002)
	

Source: Travel UCD Research, June 2002

TABLE 9: Use of static and rolling dropdowns

Style	Travel agency	Hotel only	Hotel chain	Total
Static	9	48	17	74
Rolling	4	11	3	18
Other	1	7	1	9

Source: Travel UCD Research, June 2002

Table 9 demonstrates that the overwhelming majority of hotel websites use static dropdowns (January to December).

Guideline

- A rolling dropdown should be used in conjunction with a combined month and year entry. This reduces the possibility of users accidentally entering a date that has already passed.

4.4 Number of nights – text or dropdown?

For date layout styles that include a number-of-nights entry component, there are two options:

- Use a dropdown
- Allow users to enter the number of nights directly, using their keyboard

TABLE 10: Text and dropdown examples

Date layout style	Examples
Dropdown	 
Text	

Source: Travel UCD Research, June 2002

TABLE 11: Use of text or dropdown

Style	Travel agency	Hotel only	Hotel chain	Total
Dropdown	5	28	5	38 (73%)
Text	1	11	2	14 (27%)

Source: Travel UCD Research, June 2002

Table 11 shows that 73% of websites that require number-of-night entries use dropdowns.

When deciding whether to use a drop down or a text entry you should consider if the previous user interaction with the website was by mouse or by keyboard. The goal is to reduce the number of times the user has to move from using the keyboard to the mouse and back again.

Guideline

7. To enter the number of nights, a dropdown entry should be used rather than a text entry, in particular if the other date entry fields require mouse action.

5 Setting default values on the date-entry components

5.1 Start date

A ‘default’ is the value that the form takes when seen for the first time.

The start date and the stay length can both be set by default.

TABLE 12: Default start dates

Default start date	Travel agency	Hotel only	Hotel chain	Total
Not set / Other	2	21	8	31
Today	3	23	12	38
+1 day	1	10	2	13
+2 days	-	4	-	4
+3 days	1	2	-	3
+4 days	1	-	-	1
+5 days	1	2	-	3
+7 days	3	2	-	5
+8 days	-	1	-	1
+10 days	-	1	-	1
+14 days	4	2	-	6
+21 days	3	-	-	3

Source: Travel UCD Research, June 2002

Table 12 demonstrates that the most popular setting is a default start date of ‘today’, with 49% of all websites that set default start dates choosing this value.

Guidelines

8. Don’t set the default date to a non-changing date such as 1st of January.
9. Consider setting the default to ‘today’ although this should be decided in context with your website goals and marketplace.
10. Don’t default to ‘today’ – if you are not able to take same-day bookings. Users may just be conducting a search to see how your site works – so the default value should provide a valid set of results, rather than an error.
11. A default date should not overwrite a date that a user has entered previously in that session. I.E if the user has searched for 18th of July and then returns to the search page, set 18th of July as the default, not ‘today’ or another default. This can be achieved using JavaScript and cookies.

5.2 Stay length

TABLE 13: Default stay lengths

Default stay length	Travel agency	Hotel only	Hotel chain	Total
Not set / Other	4	24	8	36
1 night	5	35	14	54
2 nights	8	6	-	14
3 nights	-	3	-	3
7 nights	2	-	-	2

Source: Travel UCD Research, June 2002

Table 13 demonstrates that the most popular default setting is a stay length of one night, with 74% of all websites using this value.

6 Cultural differences in date format

Different cultures are used to different date formats, for example:

UK	DD – MM – YYYY
US	MM – DD – YYYY
CHINA, JAPAN	YYYY – MM – DD

[where DD = Day, MM = Month, YYYY = Year]

This means that, if you target your website at different international audiences, you should consider regional needs.

ISO Standard 8061

The International Organization of Standardization (ISO) date format – ISO 8061 – suggests that dates should be in the following format:

YYYY-MM-DD

e.g.: **2002-06-19** or **2002 June 19th**

Good reasons to support this format:

- Language independent
- Cannot be confused with existing date formats
- USA is already using MONTH, DAY format
- This is the standard format in: Japan, China, Korea, Hungary, Sweden, Finland, Denmark

This study is not an exhaustive review of cultural issues relating to date entry. This issue has been raised because it may be relevant to your particular marketplace.

Guideline

12. Be aware of date format cultural issues within your target market.

7 Calendar popups

7.1 Usage

A 'calendar popup' is a new browser window that presents users with a full calendar view of one or maybe several months.

Users browse the calendar by moving forwards or backwards a month at a time. When they see the date they wish to select, they click on it. The calendar popup then closes, and the date is entered into the main webpage.

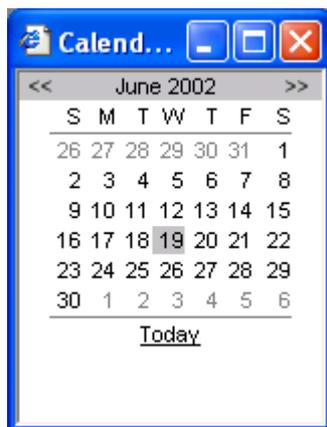


FIGURE 3: Example popup calendar

TABLE 14: Calendar popup usage

Style	Travel agency	Hotel only	Hotel chain	Total
Calendar popup	16 (84%)	18 (26%)	9 (41%)	43 (39%)

Source: Travel UCD Research, June 2002

Table 14 demonstrates that there is a significant difference in calendar popup usage between the large travel agency websites and the hotel only / hotel chain websites.

Guideline

13. A calendar popup should be used.

Implementation note: Popup should display just to the right of the calendar icon.

7.2 Calendar popup design

The big question when designing a calendar popup is how many months to show the user.

TABLE 15 : Number of months displayed at one view in calendar popups

Number of months displayed	Travel agency	Hotel only	Hotel chain	Total
1 month	9	14	8	31
2 months	3	2	1	6
3 months	3	-	-	3
13 months	1	-	-	1

Source: Travel UCD Research, June 2002

Table 15 shows that 31 (72%) of the 43 calendar popups that are in use display a single month at a time. See Figure 3 above.

This design style is the standard across all three website styles with little change in approach between them.

Notes from the usability test

The following observations were made during the usability test:

- One user used the popup calendar to work out the correct date, then closed the calendar and typed the date into the date entry field. (Expedia.co.uk)
- One user closed the popup calendar because it did not display the month he was intending to travel in. He did not understand that a small arrow in the calendar popup would move the calendar forwards (Expedia.co.uk) (see Figure 4 below)

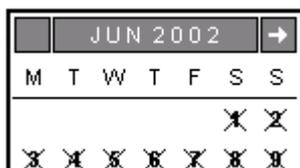


FIGURE 4: Expedia.co.uk popup – demonstrating unclear ‘change month’ arrow

Guidelines

14. One month should be shown at a time.
15. A dropdown should be used to encourage users to move from month to month rather than forwards and backwards arrows. See Figure 5 below.



FIGURE 5: Calendar popup showing month-selection dropdown

7.2.1 An alternative – 'arrival' and 'departure' on the same popup

The conventional approach prompts users to enter one date at a time (either the arrival or departure date) via the calendar popup. This is the dominant style.

HRS (<http://www.hrs.de>) - a German hotel-only website, uses a popup calendar where both the arrival and departure dates are entered on the same popup. Of the 43 calendar popups evaluated as part of this research, two websites adopt this approach.

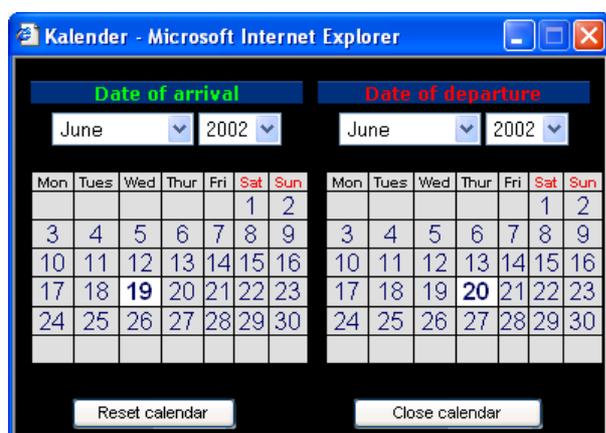


FIGURE 6:
Hrs.de popup calendar

7.3 Icon design

Where calendar popups are used, icons are normally positioned to the right of date-entry fields. For example, Figure 7 (below) shows how the icon is positioned on the Expedia.co.uk website.

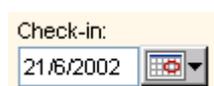


FIGURE 7: Expedia.co.uk calendar icon in use

The key aspect to consider when designing calendar icons is affordance.

7.3.1 Affordance

Affordance is defined as ‘**can the user understand what to do with it just by looking at it?**’ A comparable non-website example would be a door. When you approach it, do you know whether to push or pull? A handle (to pull or turn) or a flat panel (to push) is a common way of communicating how to open the door.

‘Affordance’ in design is vital. It should be a goal in all graphic and menu design for websites.

TABLE 16: Affordance examples

Website	Calendar icon with affordance clue	Calendar icon without affordance clue
Expedia.co.uk		
Starwood.com		

Source: Travel UCD Research, June 2002

Table 16 shows that the Expedia icon clearly uses an **affordance clue** – a downwards-pointing arrow – hinting to the user that something may happen if they click on it.

TABLE 17: Calendar icon affordance

Icon affordance	Travel agency	Hotel only	Hotel chain	Total
YES	6 (38%)	1 (6%)	2 (22%)	9 (21%)

Source: Travel UCD Research, June 2002

Table 17 clearly demonstrates that a minority of websites are using ‘affordance clues’.

It can also be noted that the travel agency and hotel chain websites (those with generally higher design budgets) have a higher use of appropriate calendar icon design.

Note:

- The table, above, does not include one hotel-only website that uses a TEXT link to its calendar popup.

Notes from the usability test

Two of the websites evaluated used calendar popups, two didn't.

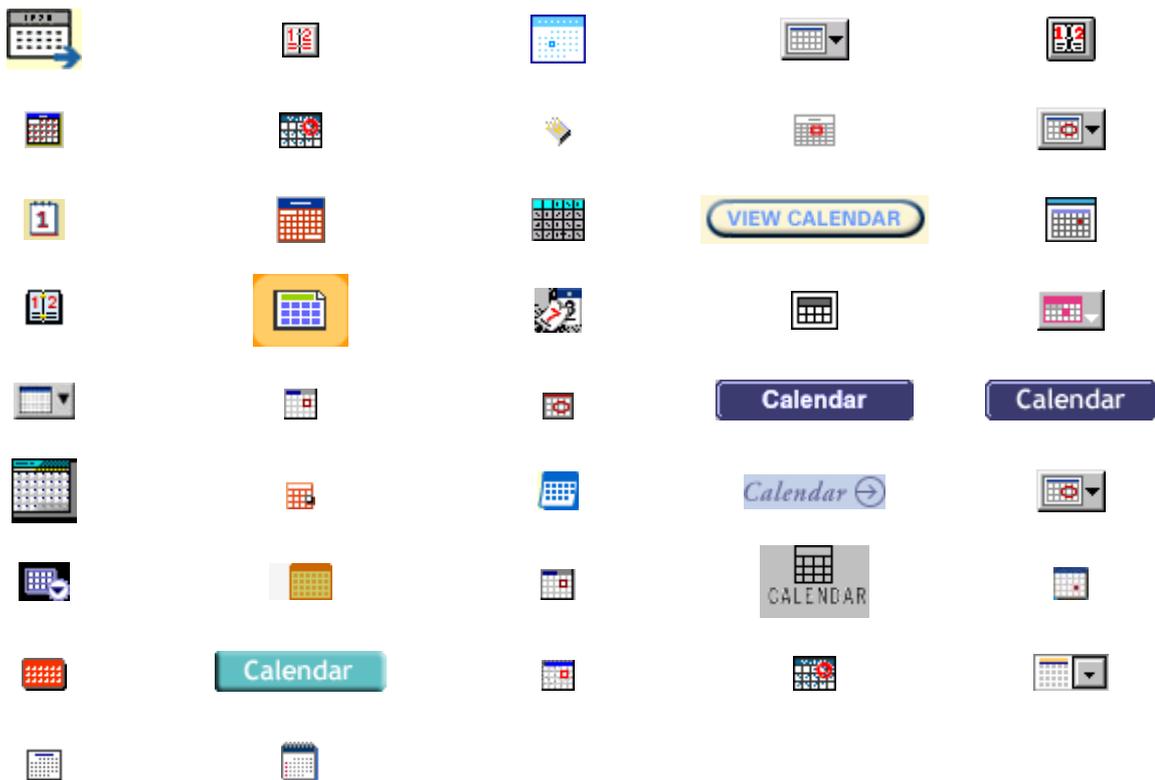
- Out of the 16 date-entry tasks carried out by the users on websites with calendar popups, calendar popups were used on six occasions.
- On one occasion, a test participant used the Windows calendar to calculate the appropriate dates as no calendar popup was integrated with the date-entry form.

Guideline

16. All calendar icons should have 'affordance clues'.

7.3.2 Icons in use today

FIGURE 8: 42 icons in use today



The images in Figure 8 above may be subject to copyright and other rights owned by third parties.

7.4 ALT tags

An ALT tag is an HTML tag that can be used to label images.

These ALT tags will be displayed to users if :

- Users are browsing with images turned off
- Users position their mouse pointer above the image with the ALT tag

These tags, if used appropriately, can be used to inform users what will happen if they click or select the graphic they are hovering over.

TABLE 18: ALT tag use on calendar icon images

ALT tags	Travel agency	Hotel only	Hotel chain	Total
Used with calendar icons	9 (56%)	8 (47%)	4 (44%)	21 (50%)

Source: Travel UCD Research, June 2002

Table 18 demonstrates that half the websites that display calendar icons also attach ALT tags to these images. This is a very low percentage for what is an easy improvement to the date-entry design.

The most descriptive ALT tag on the websites evaluated as part of this research was from **Tablet Hotels** (<http://www.tablethotels.com>), which was '*Clicking this launches a popup calendar which you can select your dates from*'. Just using the word 'Calendar' as ALT text is not sufficient.

Guideline

17. All calendar popup icons should have an ALT text description.
18. The ALT tag should describe what will occur when the user clicks the calendar icon. The word 'Calendar' is not sufficient.

8 Text

The text of a website, especially text used to direct users towards different actions, has to be carefully considered, taking into account a number of factors. For example, on an English language website, do all users speak English as a first language – or is the site to be used by people who have limited English capability?

In this study we looked at the text labels used to describe:

- Start date
- End date
- Number of nights



8.1 Start date text

TABLE 19: Text used for 'start date'

Start date text	Travel agency	Hotel only	Hotel chain	Total
Arrival date / date of arrival	2	24	13	39
Arrival	-	11	-	11
Check-in date	8	17	4	29
Check in	9	9	3	21
First night	-	2	-	2
Other / unmarked	-	5	2	7

Source: Travel UCD Research, June 2002

Table 19 demonstrates that there is a division between hotel-chain websites and travel-agency websites. Hotel-chain websites favour *'arrival / arrival date / date of arrival'* whereas the travel agency websites favour *'check in / check-in date'*.

The difference between the two approaches may be because travel agency sites sell air tickets as well as hotel reservations. For flight sales, the arrival date is very different to the check-in date – and maybe text from the flight booking section of the sites has been carried across to the hotel booking section.

Within the hotels themselves (not websites) the date that a customer will arrive is predominantly referred to as the arrival date although check-in date is sometimes used. This industry text is carried through to hotel chain websites where *'arrival date / date of arrival'* is dominant.

Date / no date

62% of all websites use the word 'date' to label a date entry ('arrival date / date of arrival / check-in date'). This label ensures that the user understands that it is the date that is required – not the time or the day of the week or some other kind of arrival specific information.

Guidelines

19. Text should be based on 'arrival' rather than on 'check in' – but this can depend upon website specific requirements.
20. The word 'date' should be present within the field label.

8.2 End date text**TABLE 20: Text used for 'end date'**

End date text	Travel agency	Hotel only	Hotel chain	Total
Departure date / date of departure	1	10	11	22
Check-out date	6	10	3	19
Check out	7	7	3	17
Departure	-	7	-	7
Leaving	-	1	-	1

Source: Travel UCD Research, June 2002

Table 20 reflects the style of date text used for the start date (see Table 19).

8.3 Stay length text**TABLE 21: Text used for 'stay length'**

Stay length text	Travel agency	Hotel only	Hotel chain	Total
Number of nights	2	11	3	16
Nights	2	8	1	11
No. of nights	-	9	1	10
# of nights	2	5	-	7
For XYZ nights	-	3	-	3
No. nights	-	2	-	2
Not marked	-	-	1	1
Other	-	1	1	1

Source: Travel UCD Research, June 2002

Table 21 demonstrates the wide range of words used to describe the stay length – although the non-abbreviated text ('number of nights' or 'nights') is dominant. This text is used when the 'start date' / 'number of nights' style date-entry is used, as previously described in section 3.2.

Guideline

21. Text should not be abbreviated.

9 Reducing user error

Design goals for the date-entry section of any hotel booking website should aim to:

- Reduce the number of date-entry errors that the user could make
- Reduce the impact of date-entry errors, should they occur
- Enable the user to see, before the error is made, that the date is incorrect (i.e. support self-correction before the error is actually made)

9.1 Show the day of the week

In section 3.1 we noted that one of the scenarios that a user may be considering when thinking about dates is ‘staying in a hotel next Friday, for one night’. Other users may think of their booking date as 21st of June – but know that it is a Friday.

Designers can help these users check that the date that they have entered is correct. This could be done by automatically calculating the day of the week for the date that has been entered, as the example below demonstrates:



FIGURE 10: Le Méridien – Displaying day of the week

TABLE 22: Display day of the week

Day of the week display	Travel agency	Hotel only	Hotel chain	Total
YES	-	6	1	7 (6%)
NO, but is on calendar popup	16	14	8	38 (35%)
NO	3	48	13	64 (59%)

Source: Travel UCD Research, June 2002

Table 22 demonstrates that only 6% of all websites evaluated are helping users by showing the day of the week. On 59% of websites, there is no method for the user to check visually, using day of the week as a guide, that the date has been entered correctly.

Using the calendar popup

The majority of calendar popups display the day of the week. They provide users with some additional assistance on sites that do not automatically calculate days of the week. This accounts for 35% of all websites.

Notes from the usability test

In the usability test, two different users, on two occasions, tried to type the day of the week into the non-enterable day of the week display.



FIGURE 11: Viator / British Airways Holidays – displaying day of the week

So, if you do display the day of the week – ensure that it looks like Figure 11 from Viator / British Airways holidays rather than Figure 10 from Le Méridien.

Guidelines

22. Automatically calculating, and displaying, the day of the week should be used on all date-entry functionality.
23. The day of the week should be displayed to the user as information – rather than in a box that suggests to the user that it can be amended.

9.2 Error checking

Errors can be checked for at three stages

1. When the user enters the date on the form
2. When the user submits the form – and starts, for example, a search request
3. On the display of the next page

Checking errors at stages 1 and 2 can be achieved using JavaScript. Checking at stage 3 requires website-specific development.

We suggest that, as a minimum, the following checks occur:

Error checks on entry of date:

- Date exists (i.e. not 31st of February) – Could be combined with a means to automatically change dates to the nearest viable date

Error checks on submission of form:

- Arrival date is before departure date
- Length of stay is at least one day, but less than default maximum stay (maybe 99 nights?)
- The arrival date is after today (i.e. not in the past)
- Departure date is not beyond maximum future date booking capability of your system (maybe 12 months?)

Error checks on next page:

The checking on the next page needs to repeat the previous date checks. This is because JavaScript may not pick up all errors on all occasions on all browser combinations.

- Date exists
- Arrival date is prior to departure date
- The arrival date is prior to or equal to the last available booking date for that hotel
- Length of stay is greater than or equal to property minimum length of stay
- Length of stay is less than or equal to property maximum length of stay
- Departure date is prior to or equal to the maximum future date booking capability of your system

TABLE 23: Date entry error checking (checking to see if arrival date is in the past)

Date entry error checking	Travel agency	Hotel only	Hotel chain	Total
On date entry	1	7	1	9
On submission	-	11	6	17
On next page	18	29	14	61
Not working / not present	-	8	1	9
Have to book / pay before checking	-	12	-	12
Other	-	1	-	1

Source: Travel UCD Research, June 2002

Table 23 demonstrates that only 26 of the 109 evaluated websites check that the date of arrival is not in the past.

Also note that 12 of the hotel-only websites require users to book and commit to payment on the same page as the date entry – with no date-entry validation. Customers of these websites could find themselves with a paid-for booking for the incorrect dates.

Guidelines

24. Error checking should be implemented at date entry, form submission, and on the next page.
25. Date entry should not be on the last page of the booking process – this would ensure that dates could be checked prior to payment being made.

10 Summary of guidelines

The following guidelines were suggested within this report:

Date layout style

1. The combined style should be used.
2. The number of nights should automatically be calculated from the Check-IN and Check-OUT dates.
 - a. If the user changes the Check-IN date, the Check-OUT date changes
 - b. If the user changes the Number of nights, the Check-OUT date changes
 - c. If the user changes the Check-OUT date, the Number of nights changes

Date format style

3. The Day, Month/Year approach should be used. This reduces the number of items the user has to change when entering a date.
4. Months, where shown in dropdowns, should always be full length rather than abbreviated – i.e. 'August' rather than 'Aug'.
5. The year should be displayed in the dropdown whenever you combine the year entry with the month.
6. A rolling dropdown should be used in conjunction with a combined month and year entry. This reduces the possibility of users accidentally entering a date that has already passed.
7. To enter the number of nights, a dropdown entry should be used rather than a text entry, in particular if the other date entry fields require mouse action.

Default date entry

8. Don't set the default date to a non-changing date such as 1st of January.
9. Consider setting the default to 'today' although this should be decided in context with your website goals and marketplace.
10. Don't default to 'today' – if you are not able to take same-day bookings. Users may just be conducting a search to see how your site works – so the default value should provide a valid set of results, rather than an error.
11. A default date should not overwrite a date that a user has entered previously in that session. I.E if the user has searched for 18th of July and then returns to the search page,

set 18th of July as the default, not ‘today’ or another default. This can be achieved using JavaScript and cookies.

Cultural issues with date formats

12. Be aware of date format cultural issues within your target market.

Calendar Popups

13. A calendar popup should be used.
14. One month should be shown at a time.
15. A dropdown should be used to encourage users to move from month to month rather than forwards and backwards arrows. (See Figure 5)
16. All calendar icons should have ‘affordance clues’.
17. All calendar popup icons should have an ALT text description.
18. The ALT tag should describe what will occur when the user clicks the calendar icon. The word ‘Calendar’ is not sufficient.

Text

19. Text should be based on ‘arrival’ rather than on ‘check in’ – but this can depend upon website specific requirements.
20. The word ‘date’ should be present within the field label.
21. Text should not be abbreviated.

Minimising user error

22. Automatically calculating, and displaying, the day of the week should be used on all date-entry functionality.
23. The day of the week should be displayed to the user as information – rather than in a box that suggests to the user that it can be amended.
24. Error checking should be implemented at date entry, form submission, and on the next page.
25. Date entry should not be on the last page of the booking process – this would ensure that dates could be checked prior to payment being made.

Summary

These guidelines are not ‘set in stone’ but should be considered in context with your own site design goals. They suggest a date-entry style that we consider ‘best industry practice’.

Using your own date-entry design

These guidelines are not written to stifle innovation, but to act as a guide to a date-entry style that will work for the majority of hotel-booking website scenarios.

We suggest that if you do decide to use your own design:

1. You analyse the differences between your design and our proposed design
2. You comply with as many of our design guidelines as possible
3. You conduct a usability test to evaluate, in practice, whether your design meets your goals. (details of the usability test we conducted for the report can be found in the Appendix)

11 Appendix

11.1 Usability test overview

A usability test works by asking representative users to conduct tasks on the websites under evaluation. For this report, we used eight evaluators. Four had previously booked travel online, four had not. One of the online travel bookers had booked at one of the websites under evaluation (Expedia.co.uk)

A usability test with eight users is not 'statistically significant' but it does provide sufficient information for experienced usability test co-ordinators to understand the design issues present.

Travel UCD conduct usability tests on a regular basis either for research purposes (such as for this report) or for evaluating the usability of hotel and other travel websites for clients.

11.1.1 Tasks used

The usability test, conducted by Travel UCD, used the following tasks:

'You are considering travelling to Paris with your partner (i.e. two adults), please display a list of hotels available to book from 1234 website, on date ABCD'

TABLE 24: Dates for tasks

Task	Date
A	13-15 th September
B	30 th October for 4 nights
C	2 weekends time – for the Friday / Saturday night
D	29 th September to 2 nd October

11.1.2 Overview of the sites used in the usability test

The four websites were chosen for their range of functionality and approach.

TABLE 25: Websites evaluated in the usability test

Site	Site name	URL
1	Opodo	http://www.opodo.co.uk
2	Expedia	http://www.expedia.co.uk
3	Travel Select	http://www.travelselect.com
4	Hotel Switch	http://www.hotelswitch.com

The following three websites represent the three distinct date-entry layouts, as described in section 3.2:

Opodo – represents the 9% of websites that have the combined date-entry layout of check in, check out, and number-of-nights dropdown. Also represents the 39% of websites with a calendar popup and the 52% with a split day / month / year entry.



The screenshot shows a date entry form with three rows. The first row is labeled 'Check-in' and contains three dropdown menus for day (24), month (Jun), and year (2002), followed by a calendar icon. The second row is labeled 'Number of nights*' and contains a dropdown menu for '1'. The third row is labeled 'Check-out' and contains three dropdown menus for day (25), month (Jun), and year (2002), followed by a calendar icon.

FIGURE 12: Opodo.co.uk

Expedia – represents the 49% of websites that have check-in / check-out layout. Also represents the 39% of websites with a calendar popup and the 7% with direct date entry (DD/MM/YY).



The screenshot shows two input fields. The first is labeled 'Check-in date: (DD/MM/YY)' and contains a text box with a calendar icon. The second is labeled 'Check-out date: (DD/MM/YY)' and contains a text box with a calendar icon.

FIGURE 13: Expedia.co.uk (Hotels tab)

Travel Select – represents the 39% of websites that have check in / number of nights. No calendar popup (61%)



The screenshot shows a date entry form with two rows. The first row is labeled 'Check in date' and contains two dropdown menus for day (1) and month (July). The second row is labeled 'Number of Nights' and contains a dropdown menu for '2 nights'.

FIGURE 14: travelselect.com

The following website, although similar in style to Expedia, is different in other aspects:

Hotel Switch – represents the 49% of websites that have check in / check out and the 6% that display days of the week. No calendar popup (61%).



The screenshot shows a date entry form with two rows. The first row is labeled 'Arrival date' and contains a text box with 'Monday' and three dropdown menus for day (24), month (June), and year (2002). The second row is labeled 'Departure date' and contains a text box with 'Monday' and three dropdown menus for day (24), month (June), and year (2002).

FIGURE 15: HotelSwitch.com

11.1.3 User errors made in the usability test

Each error made by a user during a usability test is an opportunity to learn more about the design.

For this evaluation, we recorded errors that fell into the following categories:

- Wrong use of functionality
- Incorrect date entry (i.e. wrong date entered) – and submitted to the site

TABLE 26: Incorrect date entry, by site

Website	Errors made
Travel Select	5
Hotel Switch	2
Expedia	2
Opodo	1

Source: Travel UCD Research, June 2002

TABLE 27: Incorrect date entry, by task

Date task	Errors made
2 weekends time – for the Friday / Saturday night	5
30 th October for 4 nights	2
29 th September to 2 nd October	2
13-15 th September	1

Source: Travel UCD Research, June 2002

TABLE 28: Wrong use of functionality, by task

Date task	Errors made	Error description
Expedia	2	Entering incorrect date format (see 4.1) Using the calendar for date calculation, but not clicking on the date to put the date into the correct field (see 7.2)
Hotel Switch	2	Trying to enter the date by typing the day of the week in the day of week display (see 9.1)
Travel Select	0	-
Opodo	0	-

Source: Travel UCD Research, June 2002

Each of the four sites was visited eight times, and each task conducted eight times – so the maximum score could be eight errors (maximum one error per task).

Tables 26 to 28 demonstrate that there are a large number of errors on basic date entry functionality – with plenty of room for improvement.

Opodo, using the combined style (Check IN, Number of nights, Check OUT) has the least errors.

11.2 Sites used in the statistical analysis

TABLE 29: Sites used in the statistical analysis

Travel agency (19)	Hotel only (68)		Hotel chain (22)
Cheaptickets.com	1800usahotels.com	Hotelquest.com	Accorhotels.com
Ebookers.co.uk	4hotelsnow.com	Hotelsabroad.co.uk	Bestwestern.com
Expedia.co.uk	Activehotels.com	Hotelscentral.com	Choicehotels.com
Hotwire.com	All-hotels.com	Hotelshop.com	Corushotels.co.uk
Lastminute.com	Allthebesthotels.com	Hotelswitch.com	Devereonline.co.uk
Lastminutetravel.com	Andbook.com	Hotels.com (HRN)	Hilton.com
Onetravel.com	Bookhotels.co.uk	Hotelselect.co.uk	Jarvis.co.uk
Opodo.co.uk	Bookonline.it	Hoteltravel.com	Jollyhotels.it
Orbitz.com	Bookings.org	Hotelworld.com	Jurysdoyle.com
OTC-UK.com	Bhrc.co.uk	Hrs.de	Lemeridien-hotels.com
Priceline.com	Centralreservations.org	lhotelpass.com	Marriott.com
Telmeglobaltraveller.com	Citybound.co.uk	Inntopia.com	Maritim.de
Travelhero.com	Cnghotels.com	Laterooms.com	Mill-cop.com
Travelnow.com	Dhbc.co.uk	Leisurehunt.com	Moathousehotels.co.uk
Travelocity.co.uk	Direct-hotels.co.uk	Leisurelinxuk.com	Orient-express.com
Travelselect.com	Discounthotelreservation.org	Lodging.com	Radisson.com
Travelstore.com	E-hotelbooking.com	Londontown.com	Sixcontinentshotels.com
Travelweb.com	Eurhotels.com	Needahotel.com	Srs-worldhotels.com
Trip.com	Euro-hotels.com	Octopustravel.com	Starwood.com
	First-option.co.uk	Placestostay.com	Thistlehotels.com
	Givemeabreak.com	Quickbook.com	Travelinn.co.uk
	Hdn.com	Resnet.co.uk	Travelodge.co.uk
	Hotelbook.com	Simplyreserve.co.uk	
	Hotelcity.com	Sunscale.com	
	Hotelconnect.co.uk	Superbreak.com	
	Hoteldirect.co.uk	Tablethotels.com	
	Hoteleasy.com	Totalstay.com	
	Hotelgenie.com	Turbotrip.com	
	Hotelguide.com	Usahotelguide.com	
	Hotelhub.com	Usarooms.co.uk	
	Hotellifestyle.com	Venere.com	
	Hotellocaters.com	Viator.com (BA Holidays)	
	Hotel-london.co.uk	Wotif.com	
	Hotelnets.co.uk	Youstay.com	

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[END OF REPORT]