

Proposal of Lunar Calendar System to Device API

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1. Introduction

A lunar calendar is a calendar that is based on cycles of the moon phase. Most lunar calendars are, in fact, lunisolar; such as the Chinese, Hebrew, and Hindu calendars, and most calendar systems used in antiquity. The Hebrew, Buddhist, Hellenic, Hindu lunisolar, Tibetan, Chinese, Vietnamese, Mongolian, and Korean calendars are all lunisolar. (In the present age, there is no distinguish between lunar and lunisolar, so, in this document, I will note "Lunar" only)

Regarding on the usage of lunar calendar in Korea,

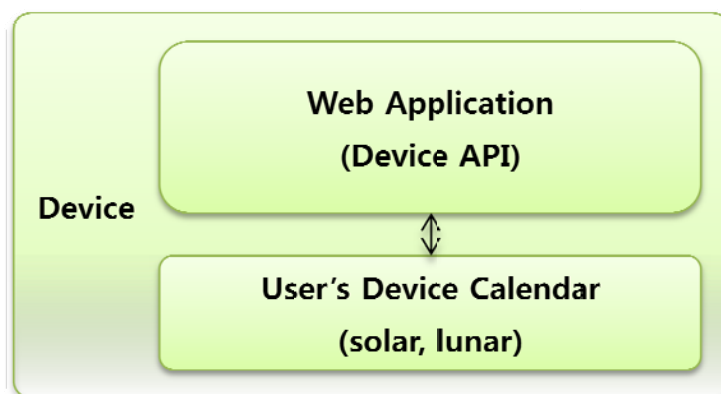
- The major traditional events such as new year's day, Korean Thanksgiving day(celebrated on the 15th day of the eighth lunar month), and Buddha's Birthday are officially Korean national holiday
- Many Korean hold a ceremony(to pray) for the repose of one's ancestors
- Some Korean celebrate ones birthday with lunar calendar system.

In conclusion, the main usage of lunar calendar system in Korea is concluded birthday, anniversary setting, in some tasks.

2. Lunar Calendar Use Cases in Calendar API

The following use case is the cases should Lunar Calendar system in Calendar API.

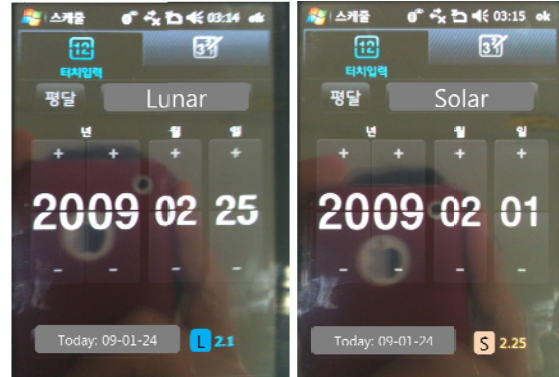
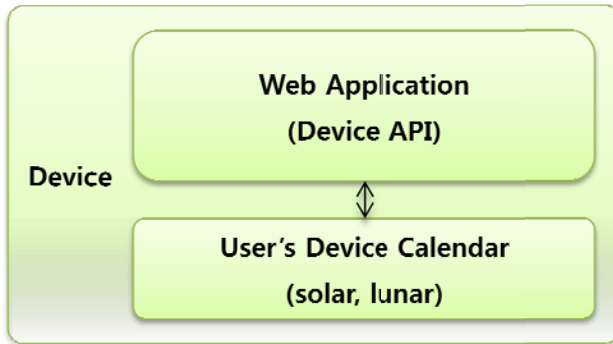
[Use Case 1: A web application would like to access the device calendar]



- Note : the user would like to check the device calendar(lunar calendar) for an

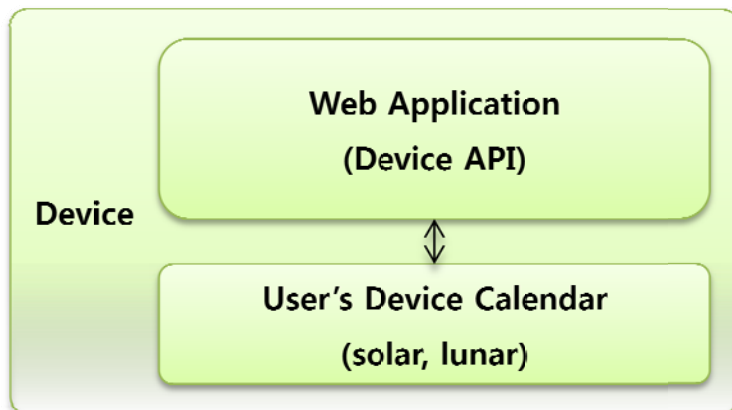
appointment

[Use Case 2: A user would like to create/modify/delete a Calendar appointment]



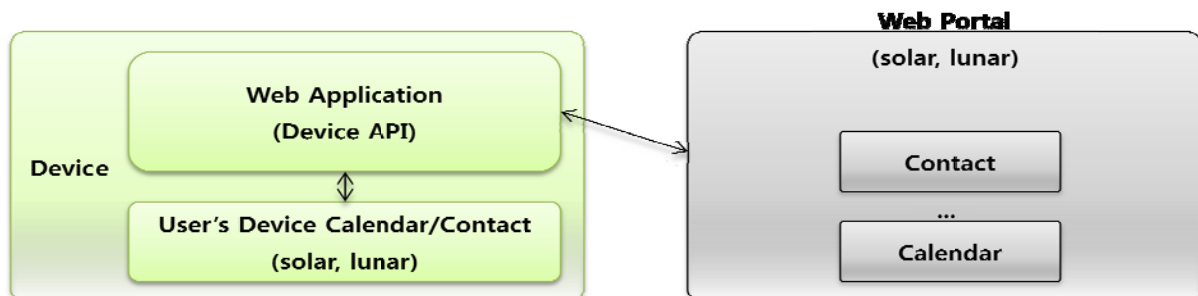
- Note : For Create/modify/delete calendar appointment with lunar, it is required to check lunar/solar check.

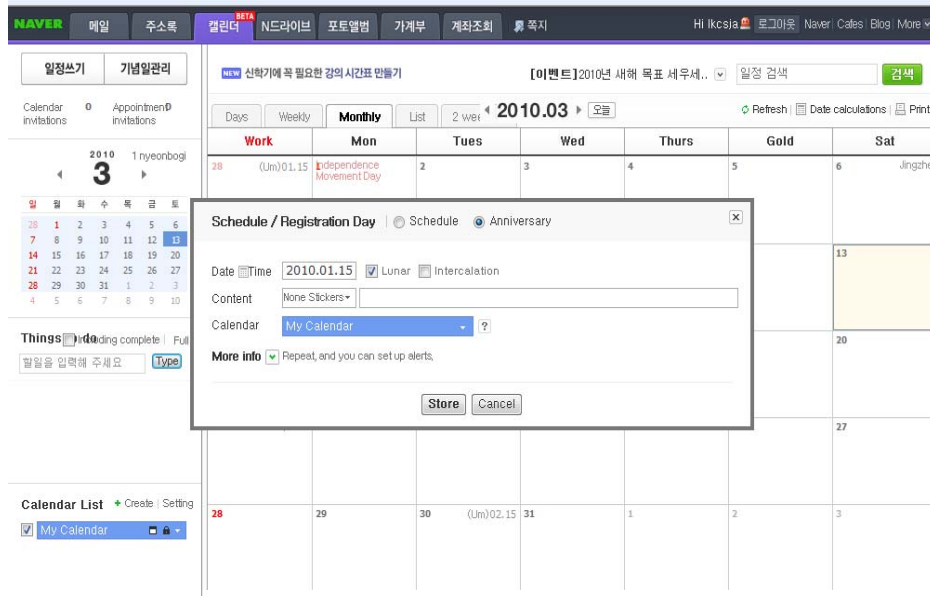
[Use Case 3: A user would like to enter a birthday of his friend with a recurrence event]



- Note : The birthday can be added with lunar calendar system.

[Use Case 5: A web application would like to synchronize with Web portal]





- Note : A user hope to synchronize with User's device calendar service of Web Portal using Web application.
- In this case, if calendar of Web portal supports lunar calendar, and user's device calendar also support Lunar calendar, the Calendar API should recognize the date as lunar or solar calendar system.
- As you see above figure, this case is that User's Device Calendar and Calendar in Web Portal can support solar calendar system. In that case, If calendar API treat the date as solar calendar system from a appointment(that is lunar calendar), there is mismatch problem during the synchronization between User's Device Calendar and Calendar in Web Portal.

3. Discussion

Lunar calendar system in Korea is essential and practical for the daily life, so, most of Korean Mobile phone adopt the lunar calendar system in calendar and birthday of contact information.

It is worried that information mismatch problem on solar/lunar calendar system in clause 2, so, it is required to discuss/survey on this issues, and collection idea to solve the problems.

Reference

- [1] http://en.wikipedia.org/wiki/Lunisolar_calendar
- [2] <http://aa.usno.navy.mil/faq/docs/calendars.php>
- [3] http://www.mandarintools.com/calconv_old.html