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METHODS OF DEVELOPING THE EVENT-AGENCY SITE

The purpose of the article is to develop a method of creating an Event-agency website with accelerated mobile pages. The practical result of the article are recommendations to programmers and designers regarding the development of the Event-agency site with accelerated mobile pages. To solve this goal, the article analyzes the main groups of site development methods. Namely, the analysis of methods of manual writing of sites in one or more web programming languages and methods of automated creation of sites with the help of special site designers or content management systems was carried out. Due to the fact that the content management system is a certain ready-made visual and software shell in the work, it was decided that the development of the Event-agency site should be based on CMS. The article also proves the need to create an Event-agency site using accelerated AMP mobile pages, which are designed to significantly increase the speed of loading site pages on mobile devices. In this paper, the analysis and comparison of AMP plugins is performed. To integrate the Event Agency website with other websites and manage event content, the article recommends using the DJ-Events installation package, which contains the appropriate component and modules. The article analyzes the main features of the DJ-Events package regarding event management. It is recommended to show a slide show on the main page of the Event-agency website, which should be created on the basis of the free DJ-ImageSlider extension. The main possibilities of DJ-ImageSlider expansion in relation to the development of Event-agency sites are analyzed. In this article, based on the analysis of AMP plugins, an algorithm for selecting AMP plugins for the Event Agency website was developed. Based on the analysis of the existing software and sites of analogues in the study the structuring of the main stages of development of the Event-agency site is given. The factors that should be taken into account when developing the design of the Event-agency website are systematized. As an experimental part of the research in this article, the testing of the Event-agency website is performed on the basis of the developed methodology. To do this, the normal event page and its AMP version were selected. Based on the testing, it was determined that the AMP version of the page loads much faster than the regular version of the page.

Keywords: Event-agency, content management system, website, mobile devices, plugins.

Introduction

Formulation of the problem. Interest in Event management has recently grown just as much as there is a growing understanding that the professional performance of certain organizational functions increases the efficiency of organizations. Today there is a common understanding that the organization of various events in the company, such as corporate or private holidays, business events (forums, receptions, conferences), special promotions aimed at promoting goods or services, other motivational activities for staff, should be in the area of responsibility of specialists of Event-agencies. The creation of the Event-agency website significantly contributes to the rapid increase in the number of orders for agency services and the expansion of the client base.

Analysis of recent research and publications. Researches [1–5] contain analysis and meaningful description of web-based tools for creating websites. Research papers [6–9] propose approaches to the implementation of online components of mobile applications that can be used to develop sites for Event agencies. The main aspects of assessing the quality of visualization tools for the Event-agency site are given in [10, 11]. Research [12–14] is devoted to the issues of automation of control and image processing in Internet applications, including the sites of Event-agencies.

However, today in the specialized literature there is no comprehensive scientifically sound method of developing the site of the Event-agency.

The aim of the article – development of methods for creating an Event-agency website with accelerated mobile pages.

Presenting main material

All methods of site development can be divided into 2 main groups. The first group of methods of site development are methods of manual writing of sites in one or more web programming languages. The work can be done in both simple (text) and visual editors HTML and CSS. The latter allow you to create sites in WYSIWYG mode. In the case of a static site, it will be sufficient for manual writing to use "binding" HTML and CSS, with the possible inclusion of Javascript. To create the same dynamic site can not do without server-side scripts such as PHP, ASP.NET, etc. The second group of site development methods includes methods of automated site creation: with the help of special site designers or content management systems (SMS). The development of the Event-agency website should be

based on the CMS due to the fact that the CMS is a certain ready-made visual and software shell. The user can fill this shell with the necessary content, as well as change and configure it at will. A flexible system of settings, the ability to edit the CMS itself or its individual elements, the ease of adding and modifying content - all this can make the development of Event-agency sites based on the CMS truly effective.

AMP plug-ins should also be used to develop Event Agency sites. AMP pages do not replace the mobile version of the site, adaptive design or native application. This is a supplement to the chosen method of adapting the site to mobile devices. So to speak, AMP pages are alternatives for the user.

Accelerated AMP mobile pages are designed to significantly increase the loading speed of site pages on mobile devices. This is good for both user experience (UX) and SEO. Moreover, these pages are displayed in a special block in the search results of Google on mobile devices. Plus, they are displayed with a picture and a special mark.

To simplify the analysis of AMP plugins, we give a comparison in the form of table. 1. The table summarizes all the information about AMP that is required for a successful site to conduct events. It can be downloaded for free. Due to its simplicity, you can create new events, or recurring events (daily, weekly, monthly, etc., without restrictions on the end date) in minutes.

All events can be managed both in the administrator interface and in the interface of the front part of the site.

Table 1

Comparison of AMP plugins

Criteria	JAmp	wbAMP
Joomla cache support	+	-
Ability to select menu items to convert	+	+
Ability to select components for conversion	+	+
Adjust styles in admin	+	+
Support for AMP stories	+	-

Source: author's development

Integration with any website is provided by the DJ-Events installation package, which contains components and modules. The DJ-Events component is designed to manage the content of events. You can create events and assign them to selected categories. The component offers many options to choose from (global settings, view settings, download settings, permissions).

The main features include the following:
1) the ability to create recurring events;
2) integration with Google Maps;
3) support for Joomla tags;
4) display the price of the event on the event page;
5) add an external event URL to the event page;
6) adding media to the pages of the event - pictures and videos;
7) the presence of a calendar module;
8) integration with DJ-MediaTools;
9) the presence of the search module;
10) the presence of a tag module;
11) different options for displaying events;
12) manual administrative panel;
13) events can be classified into categories so that the search module can perform a deep filtering of the category, keyword and dates (from - to);
14) the ability to add events from the front of the site;
15) import of events from JEvents;
16) availability of ready-made site templates compatible with DJ-Events.

Based on the review of extensions, DJ-Events was chosen to create Event Agency sites. It is free, it has the minimum necessary functionality without unnecessary features that may interfere with the setup and subsequent use of the Event-agency site. DJ-Events is also very easy to use, appropriate and intuitive for everyone who starts working with it. A wide range of features allows you to adapt the site to any requests and suggestions, spending a minimum of your own time.

There should be a slide show on the main page of the Event-agency website, which should be created on the basis of the free DJ-ImageSlider extension.

Regarding the development of Event Agency sites, the main opportunities for expansion include the following:
1) adaptive design, touchscreen support;
2) the presence of a component and a module. You can create and manage categories and slides in the component. The module is used to display a slide show on the site;
3) the module allows you to display images from the DJ-ImageSlider component and simply from a folder on the hosting. You can create as many modules as you want and each can have different settings;
4) the ability to group slides by category;
5) the ability to add Alt and Title attributes, which significantly improves SEO-optimization;
6) animation based on CSS3 and HTML. There are 12 types of animation available;
7) each slide can have a title, description and a link to another page (material, menu item or URL);
8) you can set the start / end date and end of the publication of each slide separately;
9) display an enlarged version of the image (with title and description) after clicking on the reduced version;

10) the ability to specify the size and position of the area of the slide description;

11) automatic scrolling of slides. Infinitely or once;

12) the ability to sort the order of the slides manually in the admin. Just dragging them with the mouse;

13) setting the display time and page change animation time;

14) enable / disable the display of slide controls (buttons "Forward", "Back", "Pause", "Play", etc.). Ability to display buttons to hover the mouse cursor over the slide;

15) the ability to download images for buttons;

16) compliance with the recommendations of WCAG 2.0 section 508 (adaptation of sites for the disabled). Ability to navigate slides from the keyboard. This can be disabled, if necessary;

17) support for RTL (writing from right to left). Including the direction of slide offset;

18) themes of slides, with the ability to create your own;

19) support for Joomla 2.5, 3, 4;

20) support for multilingualism with Falang;

21) support for popular browsers: Internet Explorer 9 and later, Mozilla Firefox 10 and later, Safari 3 and later, Google Chrome 8 and later, Opera 9 and later.

Based on the preliminary analysis of AMP plugins, an algorithm for selecting AMP plugins for the Event Agency website was developed (Fig. 1).
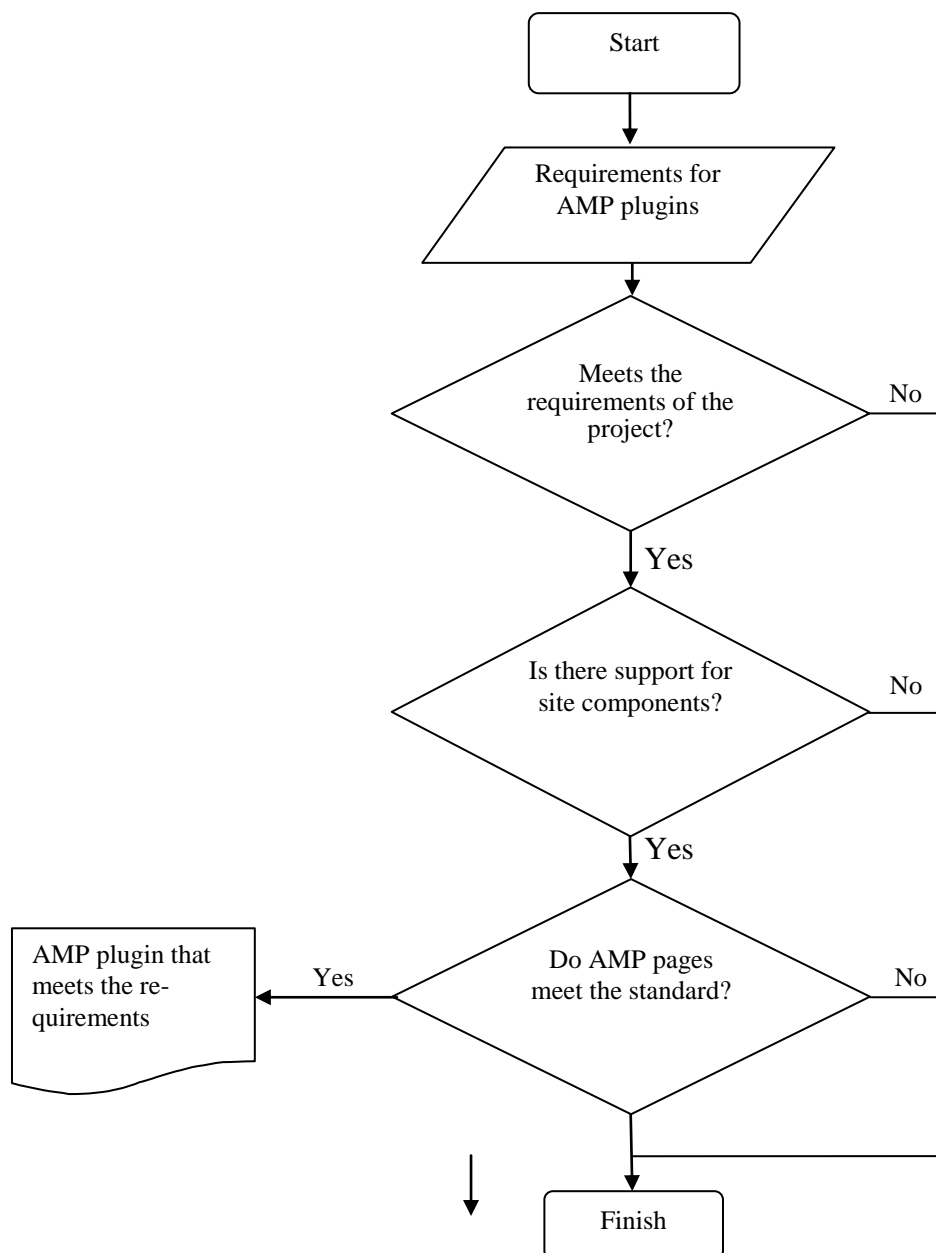
Fig. 1 Algorithm for selecting AMP plugins
Source: author's development

The website of the Event-agency must have an adaptive design, a main page in the form of landing, contacts and descriptions of services or events. To gain an advantage in search, it is advisable to implement AMP-pages on the site.

Based on the analysis of the existing software and sites of analogues, we present the main stages of development of the Event-agency site.

1) content preparation;

2) choosing and buying hosting and domain;

3) hosting settings;

4) setting up a content management system;

5) setting up extensions for the content management system;

6) setting up the AMP plug-in;

7) site testing;

8) making corrections to the site based on the test results.

In the process of creating the site of the Event-agency, specialists of completely different directions take part, on the basis of the project each participant of the process will precisely determine the scope and tasks set before him.

The process of writing a project involves the active participation of the developer and the customer. Only after the development of the project you can start working on creating a site.

There are many factors to consider when designing an Event Agency website. The site must be properly placed controls, taking into account the rules of usability and other technical features necessary for fast and high-quality operation of the resource.

The design of web resources has a number of features and is radically different from all other areas of visual design. To develop a quality design, it is necessary to know the basic languages used in writing sites and search engine promotion technology, only if you follow all the rules you can count on the successful development and quality of the web resource. In the case of the development of the Event-agency website, it was decided to use a professional template.

The usual event page and its AMP version were used to test the Event Agency's website. The following data was obtained as a result of testing for mobile devices.

For the regular version of the page:

1) the overall assessment of the degree of page optimization for mobile devices - 35 out of 100;

2) the appearance of the first content - 5.3 seconds;

3) speed index - 6.8 seconds;

4) the appearance of the largest content - 9.2 seconds;

5) time to interaction - 8.6 seconds;

6) total blocking time - 520 ms;

7) mixing the layout - 0.039.

The following results were obtained for the normal AMP version of the page:

1) the overall assessment of the degree of page optimization for mobile devices - 98 out of 100;

2) the appearance of the first content - 0.7 seconds;

3) speed index - 1.5 seconds;

4) the appearance of the largest content - 2.3 seconds;

5) time to interaction - 2.0 seconds;

6) total blocking time - 70 ms;

7) mixing the layout - 0.

The following data was obtained from testing for computer devices.

For the regular version of the page:

1) general assessment of the degree of page optimization - 78 out of 100;

2) the appearance of the first content - 1.5 seconds;

3) speed index - 1.8 sec;

4) the appearance of the largest content - 2.2 seconds;

5) time to interaction - 1.7 seconds;

6) total blocking time - 0 ms;

7) mixing the layout - 0.072.

The following results were obtained for the AMP version of the page:

1) overall assessment of the degree of page optimization - 100 out of 100;

2) the appearance of the first content - 0.2 sec;

3) speed index - 0.4 sec;

4) the appearance of the largest content - 0.6 seconds;

5) time to interaction - 0.6 sec;

6) total blocking time - 10 ms;

7) mixing the layout - 0.

Based on this, we can conclude that the AMP version of the page loads much faster than the regular version of the page.

During the analysis of the existing analogues of the Event-agency sites it was revealed that on the main page of the site all the considered analogues have a slide show. Therefore, it was also decided to create a slide show for the site. The free DJ-ImageSlider extension was chosen for this purpose.

The main opportunities for expansion include the following:

1) adaptive design, touchscreen support;

2) the presence of a component and a module. You can create and manage categories and slides in a component. The module is used to display a slide show on the site;

3) the module allows you to display images from the DJ-ImageSlider component and simply from a folder on the hosting. You can create as many modules as you want and each can have different settings;

4) the ability to group slides by category;

5) the ability to add Alt and Title attributes. Improves SEO;

6) animation based on CSS3 and HTML. 12 types of animation;

7) each slide can have a title, description and a link to another page (material, menu item or URL);

8) you can set the start / end date and end of the publication of each slide separately;

9) display an enlarged version of the image (with title and description) after clicking on the reduced version;

10) the ability to specify the size and position of the area of the slide description;

11) automatic scrolling of slides. Infinitely or once;

12) the ability to sort the order of the slides manually in the admin. Just dragging them with the mouse;

13) setting the display time and page change animation time;

14) enable / disable the display of slide controls (buttons "Forward", "Back", "Pause", "Play", etc.). Ability to display buttons to hover the mouse cursor over the slide;

15) the ability to download images for buttons;

16) compliance with the recommendations of WCAG 2.0 section 508 (adaptation of sites for the disabled). Ability to navigate slides from the keyboard. This can be disabled, if necessary;

17) support for RTL (writing from right to left). Including the direction of slide offset;

18) themes of slides, with the ability to create your own;

19) support for Joomla 2.5, 3, 4;

20) translated into Russian, English, French, German, Polish, Portuguese and other languages;

21) documentation and technical support in English. There are video lessons in English;

22) support for multilingualism with Falang;

23) support for popular browsers: Internet Explorer 9 and later, Mozilla Firefox 10 and later, Safari 3 and later, Google Chrome 8 and later, Opera 9 and later.

In fig. 2 shows the technological scheme of making the site of the Event-agency.

You can use the three most common technologies to create an Event Agency website:

1) creating a site on the designer;

2) creating a site based on a content management system;

3) creation of a site by means of programming.

The disadvantages of the first technology include the limited functionality of the designers, the dependence on the designer's platform and the lack of access to the source code of the site. The disadvantages of the third technology include high cost and long development time. Therefore, the Event-Agency website should be developed on the basis of an open source content management system.

Planning stage	At the input - information about the company.
	At the output - technical requirement.
	Specialist - webmaster.
	Software - Word, Google Chrome.
	Other - analysis of competitors' websites and search engine results.
Development stage	At the input - technical requirement.
	At the output - configured content management system.
	Specialist - webmaster.
	Software - Joomla.
	Other - analysis of extensions for Joomla.
Stage of creating pages	At the input - configured content management system.
	At the output - beta version of the website.
	Specialist - webmaster.
	Software - DJ-Enents, JAmp.
	Other - analysis of extensions for creating event- websites.
Testing stage	At the input - beta version of the website.
	At the output - finished website prototype.
	Specialist - webmaster.
	Software - Google Chrome, Opera, Edge.
	Other - website download speed test.
Placement stage	At the input - finished website prototype.
	At the output - finished website.
	Specialist - webmaster.
	Software - Google Chrome, Opera, Edge.
	Other - domain and hosting settings.

Fig. 2. Technology of making the Event-agency website
Source: author's development

With well-targeted advertising, it is possible to inform about a thousand potential customers.

Due to the fact that a person got to the site of the Event-agency, it makes sense to turn it from an abstract visitor into "ice", ie a potential customer. To do this, on the website of the Event-agency there is an opportunity to offer the visitor to enter their e-mail or phone in a special form and get a promo code for a discount.

Once the visitor reaches the Event Agency, you can give him a personal card at a discount - it will be a kind of cookie that will help track the activity of this particular customer and, if necessary, stimulate him with personalized offers.

These aspects determine the possibility of covering the cost of development both due to the scale involved due to the presence of the site visitors to the Event-agency, and due to fees for clicks and placement of banner advertising.

Conclusions

The development of the Event-agency website will create conditions for positioning the business in the network, which will allow organizing special services that ensure easy interaction of clients with the agency. For example, thanks to the unique concept of the event or the ability to place an order online, you can attract about thirty potential customers a day.

The scientific result of the article is the method of creating an Event-agency website with accelerated mobile pages.

The practical result of the article is recommendations to programmers and designers regarding the development of the Event-agency website with accelerated mobile pages.

The Event-Agency website for small and medium-sized businesses is necessary as a unique marketing channel through which you can disseminate information, publish news and special offers.

As a direction of further research may be the development of methods for assessing the effectiveness of the site of the Event-agency on the basis of the calculation of criteria for the speed of loading mobile pages.

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МЕТОДИКА СОЗДАНИЯ САЙТА EVENT-АГЕНТСТВА

Е. Н. Грабовский

Целью статьи является разработка методики создания сайта Event-агентства с ускоренными мобильными страницами. Практическим результатом статьи являются рекомендации программистам и дизайнерам по разработке сайта Event-агентства с ускоренными мобильными страницами. Для решения поставленной цели в статье проанализированы основные группы методов разработки сайтов. А именно осуществлялся анализ методов ручного написания сайтов на одном или нескольких языках веб-программирования и методов автоматизированного создания сайтов с помощью специальных конструкторов сайтов или систем управления контентом. Вследствие того, что система управления контентом представляет собой определенную готовую визуальную и программную оболочку в работе решено, что разработка сайта Event-агентства должна осуществляться на основе CMS. В статье также доказана

необ-хидность создания сайта Event-агентства с использованием ускоренных мобильных страниц AMP, которые призваны существенно увеличить скорость загрузки страниц сайта на мобильных устройствах. В данной работе проведен анализ и сравнение AMP плагинов. Для интеграции сайта Event-агентства с другими веб-сайтами и управления контентом события в статье рекомендуется использовать установочный пакет DJ-Events, содержащий соответствующий компонент и модули. В статье проанализированы основные возможности пакета DJ-Events по управлению событиями. В работе рекомендуется на главной странице сайта Event-агентства показывать слайд-шоу, которое следует создавать на основе бесплатного расширения DJ-ImageSlider. Проанализированы основные возможности расширения DJ-ImageSlider по разработке сайтов Event-агентств. В данной статье на основании проведенного анализа AMP плагинов был разработан алгоритм выбора AMP плагина для сайта Event-агентства. На основании анализа существующего программного обеспечения и сайтов аналогов в исследовании приведены структурирование основных этапов разработки сайта Event-агентства. Систематизированы факторы, которые следует учитывать при разработке дизайна сайта Event-агентства.У качестве экспериментальной части исследования в данной статье выполнено тестирование сайта Event-агентства на основе разработанной методики. Для этого был выбран обычную страницу события и его AMP-версию. На основании проведенного тестирования было установлено, что AMP версия страницы загружается гораздо быстрее, чем обычная версия страницы.

Ключевые слова: Event-агентство, система управления контентом, сайт, мобильные устройства, плагины.

МЕТОДИКА СТВОРЕННЯ САЙТУ EVENT-АГЕНТСТВА

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Метою статті є розробка методики створення сайту Event-агентства з прискореними мобільними сторінками. Практичним результатом статті являються рекомендації програмістам і дизайнерам стосовно розробки сайту Event-агентства з прискореними мобільними сторінками. Для вирішення поставленої цілі в статті проаналізовано основні групи методів розробки сайтів. А саме здійснювався аналіз методів ручного написання сайтів на одній або декількох мовах веб-програмування та методів автоматизованого створення сайтів за допомогою спеціальних конструкторів сайтів або систем керування контентом. Внаслідок того, що система керування контентом являє собою певну готову візуальну й програмну оболонку в роботі вирішено, що розробка сайту Event-агентства повинна здійснюватися на основі CMS. У статті також доведена необхідність створення сайту Event-агентства з використанням прискорених мобільних сторінок AMP, які покликані істотно збільшити швидкість завантаження сторінок сайту на мобільних пристроях. В даній роботі здійснено аналіз і порівняння AMP плагінів. Для інтеграції сайту Event-агентства з іншими веб-сайтами та управління контентом події в статті рекомендовано використовувати інсталяційний пакет DJ-Events, який містить відповідний компонент та модулі. У статті проаналізовано основні можливості пакету DJ-Events стосовно управління подіями. В роботі рекомендується на головній сторінці сайту Event-агентства показувати слайд-шоу, яке слід створювати на основі безкоштовного розширення DJ-ImageSlider. Проаналізовано основні можливості розширення DJ-ImageSlider стосовно розробки сайтів Event-агентств. В даній статті на підставі проведеного аналізу AMP плагінів було розроблено алгоритм вибору AMP плагіну для сайту Event-агентства. На підставі аналізу існуючого програмного забезпечення та сайтів аналогів в дослідженні наведено структуризацію основних етапів розробки сайту Event-агентства. Систематизовано чинники, які слід враховувати при розробці дизайну сайту Event-агентства.У якості експериментальної частини дослідження в даній статті виконано тестування сайту Event-агентства на основі розробленої методики. Для цього було обрано звичайну сторінку події та її AMP-версію. На підставі проведеного тестування було визначено, що AMP версія сторінки завантажується набагато швидше, ніж звичайна версія сторінки.

Ключові слова: Event-агентство, система керування контентом, сайт, мобільні пристрої, плагіни.