



Barcelona Rocks, a mobile app to learn geology in your city

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Barcelona Rocks is an application for personal mobile devices suitable for secondary and high school students as well as the general public without a solid background in Earth Sciences. The main objective of this app is to teach Geology using as learning resource our city façades and pavements. Additionally, Barcelona Rocks provides a short explanation about the significance of the appearance of the different rock types at the different historical periods of the city. Although it has been designed as a playful learning resource for secondary school students, the level of knowledge also allows bringing some basic concepts and principles of Earth Sciences to the general public, irrespective of age. This app is intended to provide the degree of interactivity and entertainment required by the different individual users and aims to:

- (i) Explain the techniques and experiments that allow the user to identify the different rocks, as well as their genesis.
- (ii) Introduce geology to the youngest users in a more attractive and entertaining way, providing also some information regarding the use of the different ornamental rocks during the different historical periods of the city: roman, medieval, etc.
- (iii) Provide historical and architectural information of the selected buildings in order to improve the city's historical architectural knowledge of the users.
- (iv) Show the non-expert public the importance of their country's geology.
- (v) Develop of outreach and dissemination resources taking advantage of the versatile and potent mobile application format using also the content as support material for science courses, seminars, or social learning events.
- (vi) Encourage new generations of Earth Scientists
- (vii) Promote science and scientific culture of the society, integrating culture and innovation as essential for the emergence of new scientific and technological vocations, promoting critical thinking, understanding of the scientific method and the social interest in science, technology and innovation.