Yeasts are capable of forming a wide range of multicellular communities, which enable the survival in harmful and changing environment. Surface associated biofilms, often connected with infections in human body, and colonies can serve as an example of such populations. This work investigates formation and development of complex structured colonies of *Saccharomyces cerevisiae*, which can be considered as a distinctive feature of yeast strains isolated from the wild. Architecture and properties of such colonies are fundamentally different from the spatially undifferentiated colonies of most of laboratory strains and resemble in many ways rather natural biofilms of pathogenic yeasts. Yeast populations use specific developmental processes induced by communication mechanisms to synchronize the early stages of their development. Formation of specific three-dimensional colony architecture is enabled by the presence of extracellular matrix and adhesive protein Flo11p which provide stability and integrity of the whole structure. Protection of the colonies is accomplished by spatially differentiated cell subpopulations using various mechanisms such as expression of efflux pumps capable of removing toxic substances or production of extracellular matrix functioning also as selectively permeable barrier. Phenotypic variability and loss of characteristic properties during prolonged cultivation under laboratory conditions resulting in emergence of smooth undifferentiated colonies are other features characteristic for feral yeast strains. However, these strains retain the ability to restore the formation of structured colonies and associated properties under certain conditions. The repertoire of such phenotypic changes and the mechanisms leading to formation of the life-style preferred in hostile environment may be more complex. Expression of some specific phenotypic properties is controlled by epigenetic mechanisms. Results of this work show that the formation of feral yeast strain communities involves many processes distinctive for the development of multicellular organisms and also present complex structured colonies as a powerful and tractable model for studying the processes responsible for high resistance of certain yeast populations.